

A large, solid blue circle is positioned in the upper right quadrant of the page. Inside this circle, the text "OPERATION MANUAL (for printer)" is written in white, bold, sans-serif capital letters.

OPERATION MANUAL (for printer)

**DIGITAL LASER COPIER/PRINTER
DIGITAL MULTIFUNCTIONAL SYSTEM**

Be sure to become thoroughly familiar with this manual to gain the maximum benefit from the product.

Before installing this product, be sure to read the installation requirements and cautions sections of the "Operation manual (for general information and copier operation)".

Be sure to keep all operation manuals handy for reference including this manual, the "Operation manual (for general information and copier operation)" and operation manuals for any optional equipment which has been installed.

Warranty

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<p>The display screens, messages, and key names shown in the manual may differ from those on the actual machine due to product improvements and modifications.</p>
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CHAPTER 1

BASIC PRINTING PROCEDURES

This chapter explains how to configure printer driver settings at your computer, and provides basic information on printing.

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SETTING THE PRINTER DRIVER

This section describes the method of changing the printer driver settings from your computer. If you have not yet installed the printer driver, read the accompanying "SOFTWARE SETUP GUIDE (for printer)" and install the printer driver from the CD-ROM.

Printer driver settings in Windows (selecting and setting print conditions)

Change the settings using the printer properties.

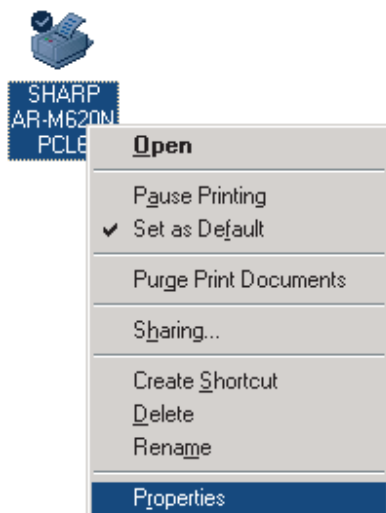
■ Windows 95/98/Me

The procedure for adjusting the settings in Windows Me is explained in the following.

1 On the [Start] menu, select [Settings] and then [Printers].

2 Right-click the installed printer driver and select [Properties] in the pop-up menu. Click the [Setup] tab in the printer driver properties.

The SHARP AR-M620N PCL6 properties is shown as an example.



3 Set each item.

For setting items, see the printer driver help. For information on viewing Help, see the following [page 1-3](#). An example of always using the document filing function is explained on [page 1-3](#).

4 Click the [OK] button.

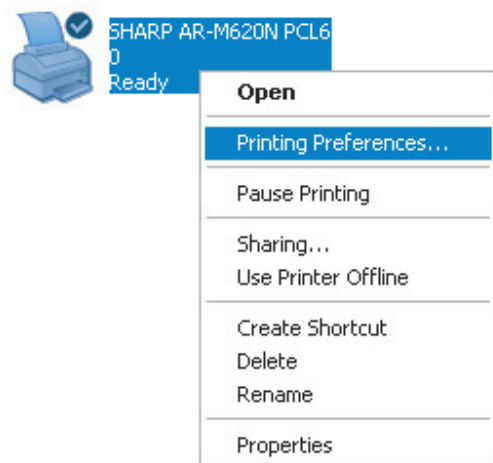
■ Windows NT4.0 / 2000 / XP

The procedure for adjusting the settings in Windows XP is explained in the following.

1 Select [Printers and Faxes] from the [Start] menu.

2 Right-click the installed printer driver and select [Printing Preferences].

The screen shows the example of selecting SHARP AR-M620N PCL6.



3 Set each item.

For setting items, see the printer driver help. For information on viewing Help, see the following [page 1-3](#). An example of always using the document filing function is explained on [page 1-3](#).

4 Click the [OK] button.

NOTE

To configure settings for installed peripheral devices such as a saddle stitch finisher, finisher, and large capacity tray, right-click the printer driver, select [Properties], and select the [Configuration] tab. (In Windows 95/98/Me, select [Properties] and then the [Configuration] tab in the [Setup] tab.) If the machine is being used as a network printer, click the [Auto Configuration] button in the [Configuration] tab to automatically set the peripheral device configuration. To display the latest tray information (paper size, paper type, and paper remaining), click the [Tray Status] button in the [Paper] tab.

■ Selecting document filing

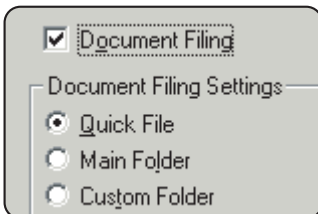
The procedure for always using the document filing function is explained below as an example. This setting is selected in the [Job Handling] tab of the printer driver window.

1 Follow steps 1 and 2 on [page 1-2](#).

2 Click the [Job Handling] tab.

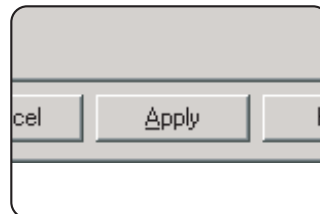


3 Select the [Document Filing] checkbox.



4 Enter a user name and a job name in the "Job ID" field.

5 Click the [Apply] button.



6 Click the [OK] button.

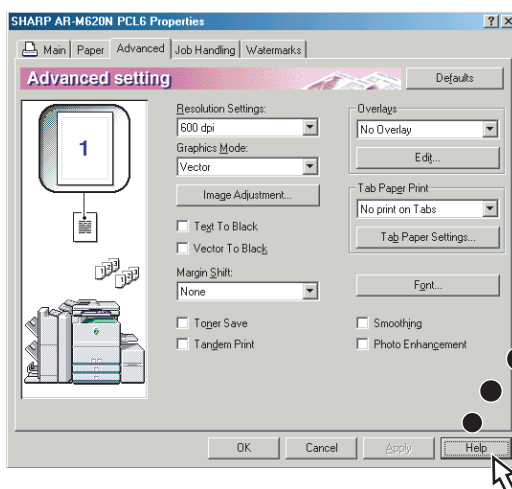
The document filing function will now be used each time you print a job.

Using the Help file to view explanations of the settings

To view on-screen explanations of the settings in the printer driver, open the Help file.

■ Opening Help in Windows

This window is the SHARP AR-M620N PCL6 Properties in Windows Me.



Click [Help] to display the Help screen.

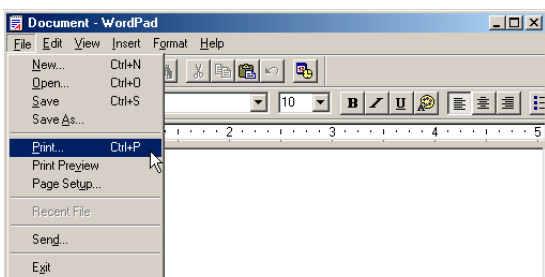
You can search for information using various methods from the tabs.

Printing

The procedure for printing in WordPad*¹ is explained as an example in this section. If you do not have any documents created in WordPad, create a text document in WordPad that can be printed.

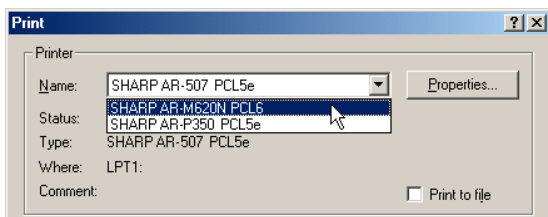
*¹ This is a standard accessory program in Windows

- 1 Open a document created in WordPad.
- 2 Select [Print] from the WordPad [File] menu.

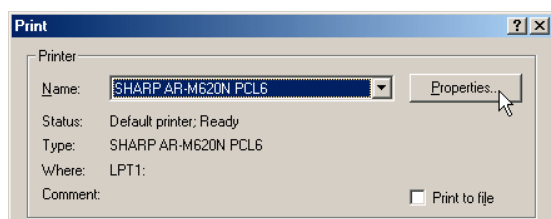


- 3 Select [SHARP AR-M620N PCL6] from the [Name] drop-down list.

(1) In Windows 95/98/Me/NT 4.0

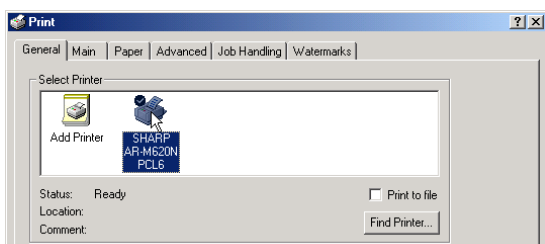


Click the [Properties] button to open the printer driver properties window.

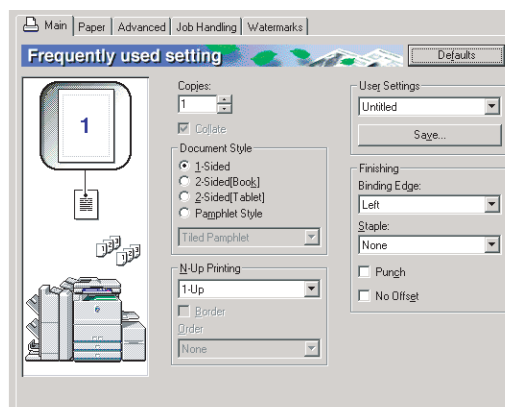


(2) In Windows 2000/XP

Select the [SHARP AR-M620N PCL6] printer icon in [Select Printer]. In Windows 2000, the properties consist of five tabs: [Main], [Paper], [Advanced], [Job Handling], and [Watermarks]. In Windows XP, click the [Preferences] button to open the printer driver properties.



- 4 Click the desired tab and configure settings.



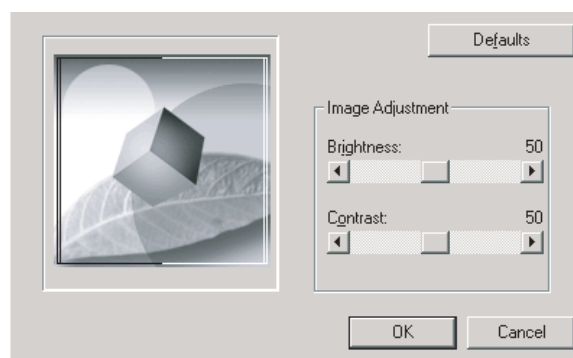
NOTES

- When the properties are opened from an application, the settings that you configure in the properties will remain in effect only while you use the application.
- For information on the settings in the properties, see "SETTING THE PRINTER DRIVER PROPERTIES" in chapter 2.

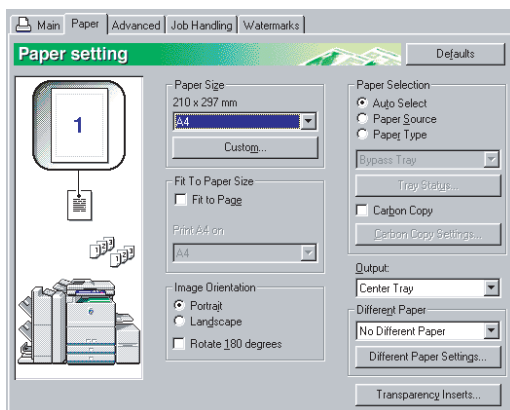
- 5 To adjust the print contrast, follow the procedure below. If you do not need to adjust the print contrast, go to step 6 on the next page.

To adjust the print contrast, click the [Image Adjustment] button in the [Advanced settings] tab. The window below will appear. Adjust the brightness and contrast in the [Image Adjustment] field.

When you are finished, go to step 6 on the next page.



6 Click the [Paper] tab.



Check the paper size to make sure it is correct. Next, specify the paper feeding method in [Paper Selection]. Normally [Auto Select] is used. When finished, click the [OK] button to close the printer properties window.

7 Click the [OK] button in the Print window in Windows 95/98/Me/NT 4.0, or the [Print] button in Windows 2000/XP.

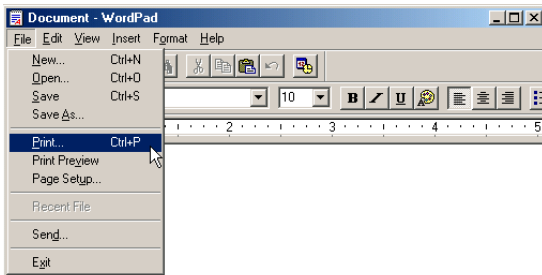
Using options to print

The procedure for using a peripheral device (option) to print is explained below using WordPad*1 as an example. If you do not have any documents created in WordPad, create a text document in WordPad that can be printed.

*1 WordPad is a software application that is included in Windows as a standard accessory.

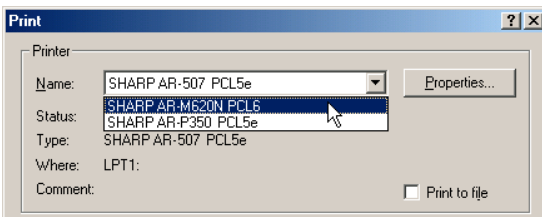
1 Open a document that was created in WordPad.

2 Select [Print] from the WordPad [File] menu.

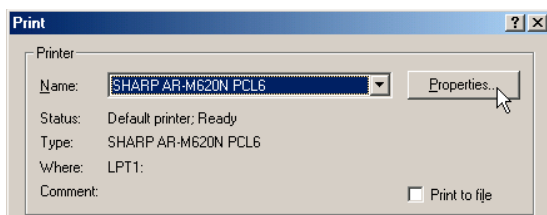


3 Select "SHARP AR-M620N PCL6" from the [Name] drop-down list.

(1) In Windows 95/98/Me/NT 4.0



Click the [Properties] button to open the printer driver properties window.

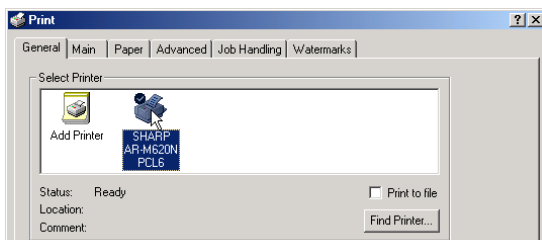


(2) In Windows 2000/XP

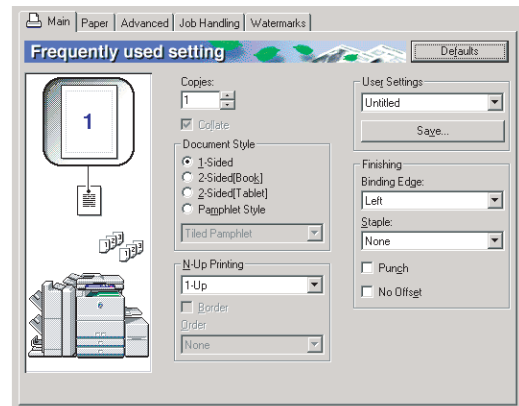
In [Select Printer], select the "SHARP AR-M620N PCL6" printer icon.

In Windows 2000, the properties consist of five tabs: [Main], [Paper], [Advanced], [Job Handling], and [Watermarks].

In Windows XP, click the [Preferences] button to open the printer driver properties.



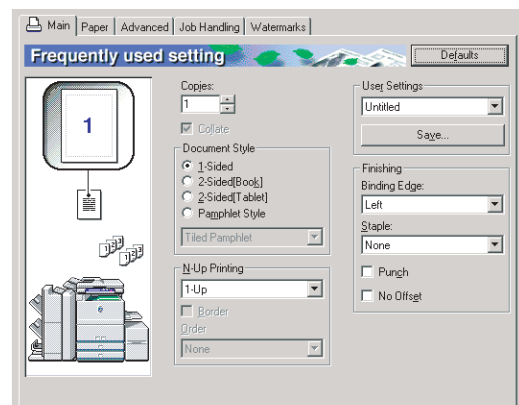
4 Click the desired tab and configure settings.



NOTES

- When the properties are opened from an application, the settings that you configure in the properties will remain in effect only while you use the application.
- For information on the settings in the properties, see "SETTING THE PRINTER DRIVER PROPERTIES" in chapter 2.

(1) To use the optional saddle stitch finisher to print, configure the settings in the following window:



① To use the pamphlet style function, select [Pamphlet Style] in the [Document Style] field and set [Staple] to [2 Staples] in the [Finishing] field.

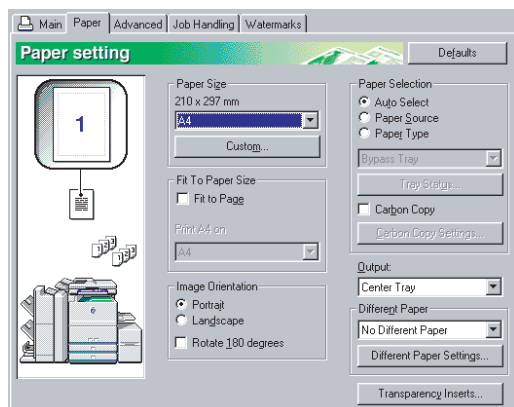
Pamphlet Style



5 Click the [Paper] tab.

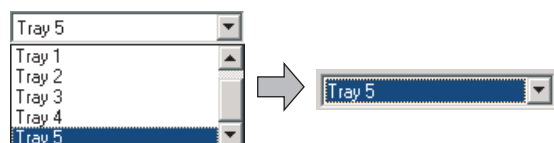
Make sure that the selected paper size is correct in the [Paper Size] field.

Next, select the paper feeding method in [Paper Selection]. Normally [Auto Select] is used. If you wish to use the optional paper tray, select it in the following window.



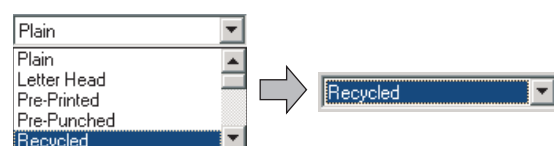
- ① To select a paper tray, select [Paper Source] in [Paper Selection] and then select the desired tray from the list.

Example: Selecting the large capacity tray



- ② To select the paper type, select [Paper Type] in [Paper Selection] and then select the desired paper type from the list.

Example: Selecting recycled paper



NOTE

The size and type of paper and whether or not a tray can be used for printing are set in "Paper tray setting" in the machine's custom settings. (See "Custom settings" in the "Operation manual (for general information and copier operation)".)

If you select [Paper Source] or [Paper Type], be sure to configure the tray settings in the [Configuration] tab of the printer driver properties.

6 Adjust the print contrast settings as needed ([page 1-4](#)). If you do not need to adjust the print contrast, go to step 7.

7 In Windows 95/98/Me/NT 4.0, click the [OK] button in the print window. In Windows 2000/XP, click the [Print] button.



CHAPTER 2

SETTING THE PRINTER DRIVER PROPERTIES

This chapter explains how to configure settings in the printer driver. The settings are changed in the software application.

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SELECTING PRINTING FUNCTIONS

Almost all print functions are selected in the print driver properties window that appears when printing from an application. The print functions can also be selected in the printer driver properties window that appears when [Properties] is selected in the printer icon menu. The printer driver settings are grouped on tabs in the printer driver properties window.

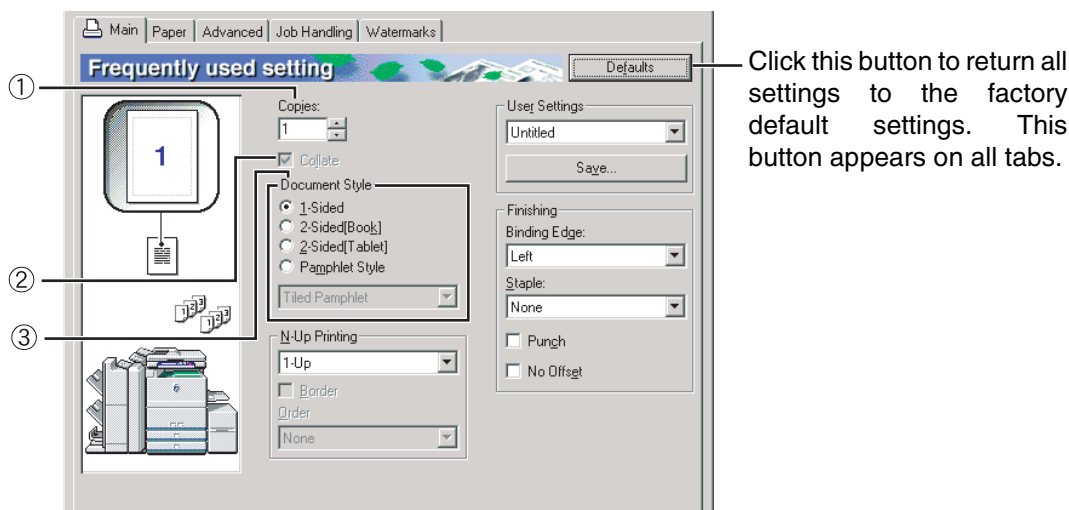
The procedure for selecting settings after opening the printer driver properties from an application is explained in this section. (The windows that are shown are the AR-M620N PCL6 printer driver in Windows Me.)

The following optional peripheral devices are installed in the printer driver windows:

Saddle stitch finisher + Inserter + Punch module + Large capacity tray

Settings in the [Main] tab

The following window appears when the [Main] tab is clicked. The settings and buttons are explained below.



① Copies

Set the number of copies.
Any number from 1 to 999 can be set.
Default setting: 1

② Collate

Select this checkbox to collate the copies.
When the staple function or punch function is turned on, a checkmark automatically appears in the checkbox.
Default setting: Selected

③ Document Style

Select one-sided or two-sided printing.
[1-Sided].....Print on one side of the paper.
[2-Sided (Book)]Print on both sides of the paper and bind at the side.
[2-Sided (Tablet)]Print on both sides of the paper and bind at the top.
[Pamphlet Style]*1Print on both sides of the paper and bind down the middle.

Default setting: 1-Sided

*1 Four selections are available for the pamphlet format.

[Tiled Pamphlet]

Print on paper double the size of the document size selected in the application.
The page order will be rearranged as required for the middle binding format.

[2-Up Pamphlet]

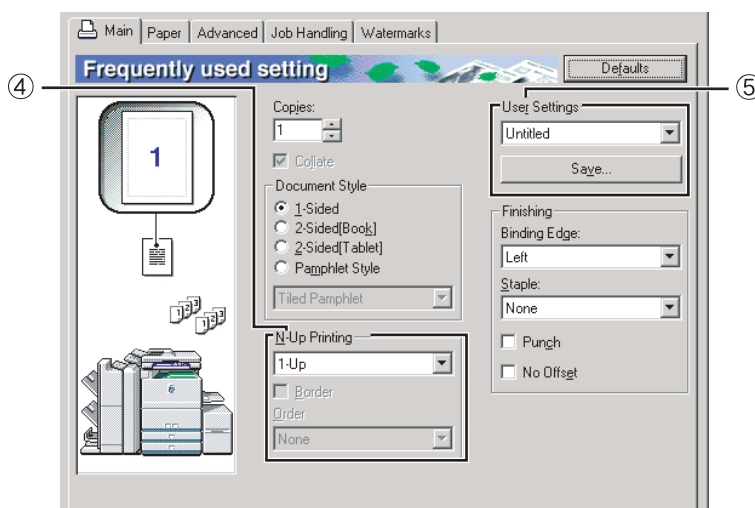
The document size selected in the application will be reduced in the same way as in 2-Up printing, and printing will take place using the selected paper size.

[Multiple Tiled Pamphlet]

When using the pamphlet function, printing takes place on paper that is twice the size of the paper specified in the application. When this function is selected and the number of pages exceeds the stapling limit, the pages are divided into groups that can be stapled, and the pages in each group are arranged pamphlet style and stapled. The groups can then be put together to form a pamphlet with the correct page order.

[Multiple 2-Up Pamphlet]

When using the pamphlet function, the pages are reduced and printed 2-Up style on the size of the paper specified in the application. When this function is selected and the number of pages exceeds the stapling limit, the pages are divided into groups that can be stapled, and the pages in each group are arranged pamphlet style and stapled. The groups can then be put together to form a pamphlet with the correct page order.



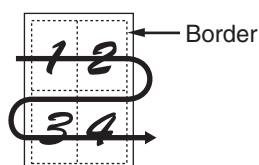
④ N-Up Printing

Each page is reduced to allow multiple pages to be printed on each sheet. The pages are printed in "Z" order on each sheet.

The following five settings are available:

[1-Up], [2-Up], [4-Up], [6-Up], [8-Up].

Default setting: 1-Up



[Border]

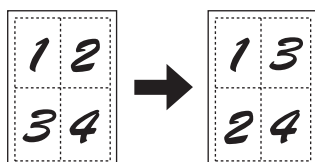
This setting is greyed out when [1-Up] is selected. Select whether or not to print a border around each page when a setting other than 1-Up is selected.

Default setting: Not selected

[Order]

This setting is greyed out when 1-Up is selected. When a setting other than 1-Up is selected, the layout of the pages on the sheet can be selected.

Example: Changing the layout of 4-Up to [Left, and Down].



⑤ User Settings

The user can store up to 30 sets of settings, allowing the settings to be easily changed by simply selecting the desired set.

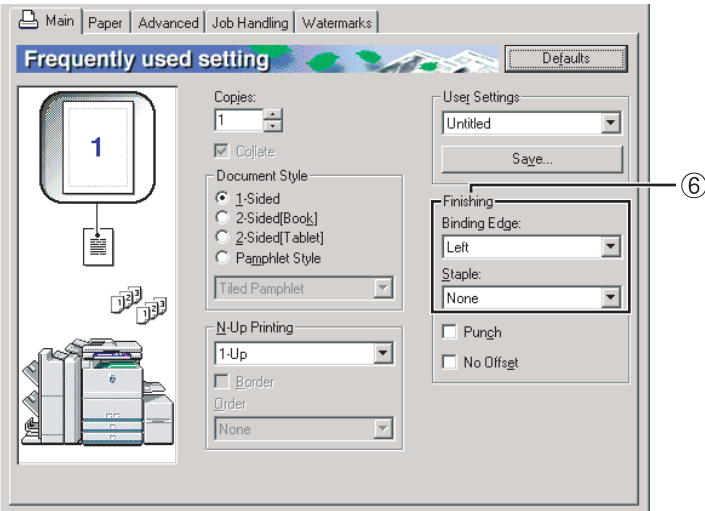
Default setting: Factory Defaults

[Save]

Save the settings under the name that appears in "User Settings".

Up to 20 characters can be entered for the name. If none of the settings have been changed (the settings are still the factory defaults), this button will be greyed out.

When [Delete] appears in the button, it can be clicked to delete a stored set of user settings.

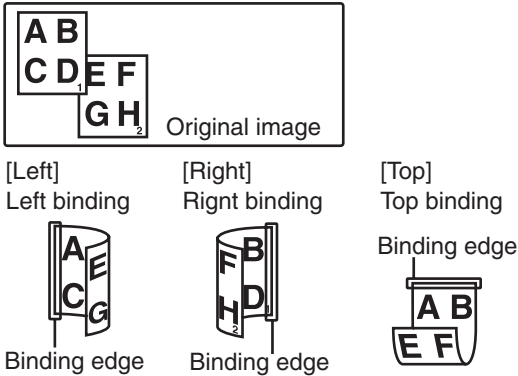


⑥ Finishing

Configure settings for staple or punch finishing.

[Binding Edge]

When automatic two-sided printing is performed, the [Binding Edge] setting is used to determine how the top and bottom edges of the front and back sides are positioned. The relation between the document and each of the settings is as follows:



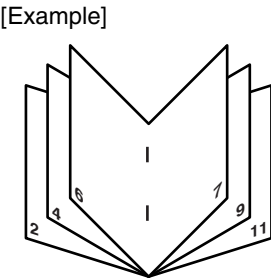
Default setting: Left

[Staple]

- [None] Do not staple.
 - [1 Staple] Staple in one place.
 - [2 Staples] Staple in two places.
- Default setting: None

Pamphlet stapling function

The paper is stapled in two places at the centreline, folded in half as shown, and delivered to the output tray.

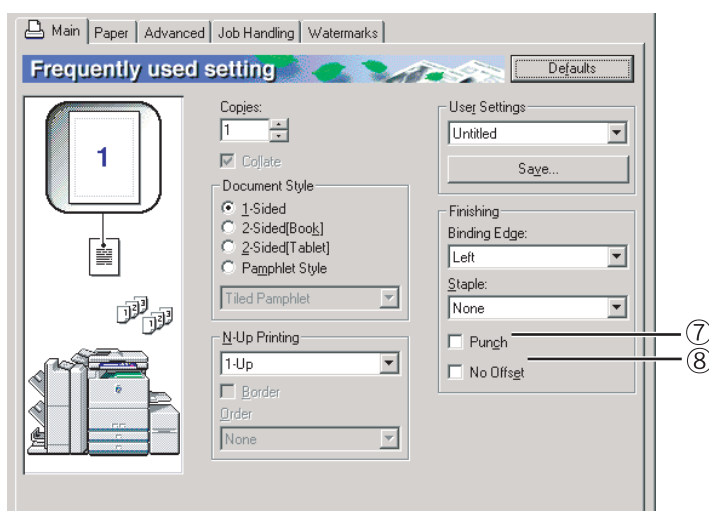


Staple sort function

Each set of pages printed using the sort function is stapled and delivered to the top tray, or stapled at the centre and delivered to the lower pamphlet tray. (Saddle stitch finisher only) The relations between stapling positions, paper feed orientations, allowed paper sizes, and stapling limits are indicated below.

Possible stapling positions

Vertical paper feeding	One staple at top left corner		Possible paper sizes: A4, B5, 8-1/2" x 11" Staple limit: 50 sheets
	One staple at bottom left corner		Same as above
	Two staples at left edge		Same as above
	Two staples at centreline		Pamphlet style is not possible using vertically fed paper
Horizontal paper feeding	One staple at top left corner		Possible paper sizes: A3, B4, 11" x 17" Staple limit: 30 sheets
			Possible paper sizes: A4R, 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11"R Staple limit: 30 sheets
	One staple at bottom left corner		Possible paper sizes: A3, B4, A4R, 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11"R Staple limit: 30 sheets
	Two staples at left edge		Same as above
	Two staples at centreline		Possible paper sizes: A3, B4, A4R, 11" x 17", 8-1/2" x 14", 8-1/2" x 13", 8-1/2" x 11"R Staple limit: 15 sheets



⑦ [Punch]

Use this to select the punch function.
When the punch function is selected, [Collate] is automatically selected.
Default setting: Not selected

Punch function (only when a punch module is installed)

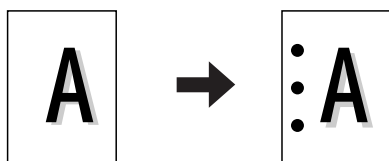
When a punch module is installed on the saddle stitch finisher, holes (two) can be punched in the printed pages before delivery to the tray. (The punch function cannot be used in combination with the pamphlet function.) When using the punch function, the automatic image rotation function does not operate.

Paper sizes that can be punched are indicated in the specifications on page 3-3 of the "Operation manual (for general information and copier operation)".

[Example]

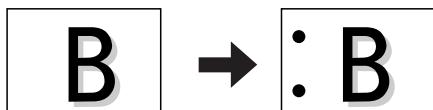
{Original 1}

{Punch positions}



{Original 2}

{Punch positions}



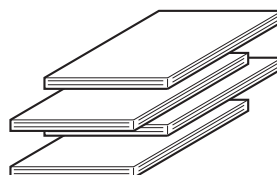
⑧ [No Offset]

Select this when you do not wish sets of collated or grouped pages to be offset from each other.
Default setting: Not selected

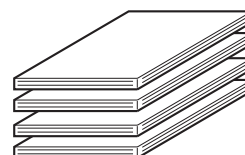
Offset function

Each set of printed pages is offset from the previous set in the tray for easy separation. (The offset function operates in the finisher or saddle stitch finisher tray.) The offset function does not operate when the staple sort function is selected.

Offset mode

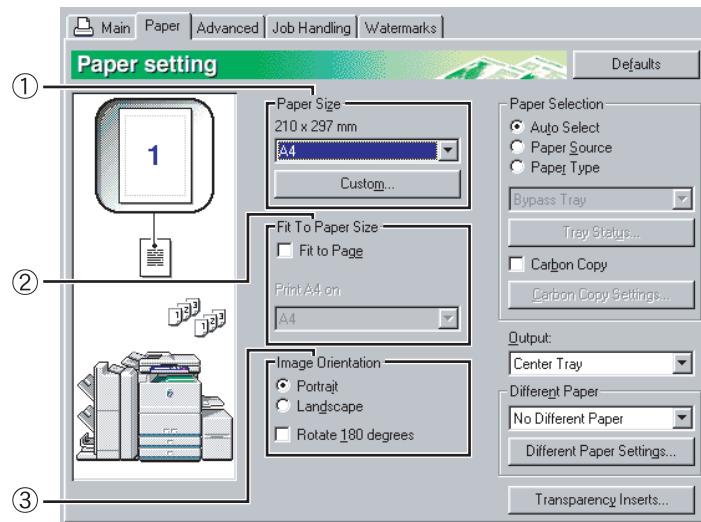


Non-offset mode



Settings in the [Paper] tab

The following screen appears when the [Paper] tab is selected. The settings and buttons in this screen are explained below.



① Paper Size

Select the size of paper to be printed on.
Click one of the paper sizes that appear in the box.
Default setting: A4

[Custom]

A custom paper size can also be set.
Only one custom paper size can be stored.
Click this button to open the window for setting the custom paper size.

② Fit To Paper Size

This field is used for the Fit to Page function. This function automatically enlarges or reduces the printed image to match the paper being used. Enlargement or reduction takes place with the image centred on the page.
To use this function, select the [Fit to Page] checkbox and then select the size of paper to be used.

NOTE

Printing normally takes place using the paper size set in the application, regardless of the paper size selected in the printer driver. When the paper size is not specified in the application, the paper size setting in the printer driver is used.

③ Image Orientation

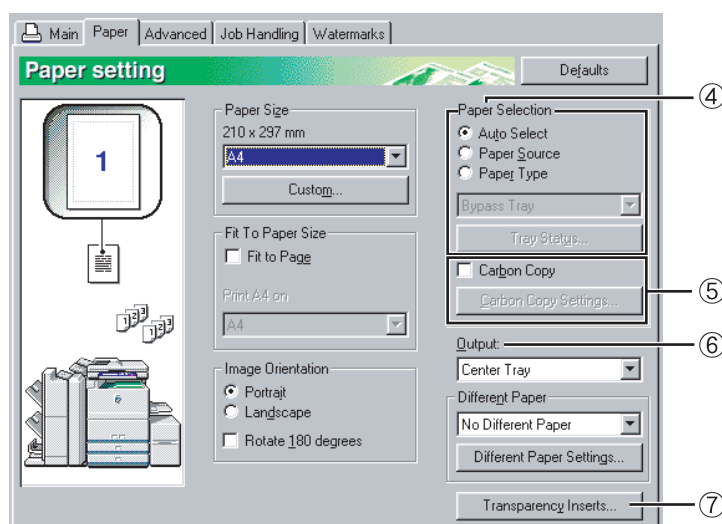
Set the orientation of the document.
Click the radio button for [Portrait] or the radio button for [Landscape].
[Portrait]..... Select portrait orientation.
[Landscape].... Select landscape orientation.
Default setting: Portrait

[Rotate 180 degrees]

Rotate the image 180° before printing.
Default setting: Not selected

[Fit To Page]

When this checkbox is selected, the print image corresponding to the paper size selected in [Paper Size] is automatically reduced or enlarged to fit the paper selected in [Fit To Paper Size].
Default setting: Not selected



④ Paper selection

Select the paper tray and paper type in this item.
Default setting: Auto Select

[Auto Select]

When [Auto Select] is selected, the tray containing the paper specified in [Paper Size] is automatically used.

[Paper Source]

When this is selected, paper is drawn from the specified tray regardless of the paper size setting.

[Paper Type]

When this selected, paper is fed from the tray that has the specified type of paper.

There are also 7 user type settings, and a name can be assigned to each type (maximum of 14 characters).

NOTE

The size and type of paper and whether or not a tray can be used for printing are set in "Paper tray setting" in the machine's custom settings. (See "Custom Settings" in the Operation manual (for general information and copier operation).)

If you select [Paper Source] or [Paper Type], be sure to configure the tray settings in the [Configuration] tab of the printer driver properties.

[Tray Status]

Click this button to display the paper size, paper type, and paper remaining in the machine's paper trays.

This function operates when the machine is used on a network.

⑤ Carbon copy

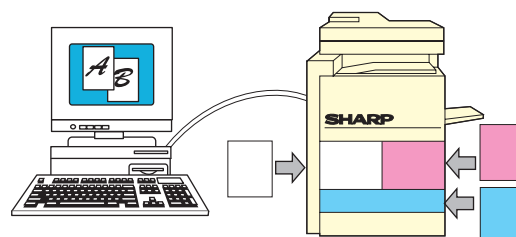
Select this function to print multiple copies of the same document on paper from different trays. Click the [Carbon Copy Settings] button to configure the carbon copy settings. For example, if regular paper is loaded in tray 1 and coloured paper is loaded in tray 2, you can print an original and a copy of an invoice. You can also load regular paper in tray 1 and recycled paper in tray 2 to print a copy for presentation and a copy for retention.

[Carbon Copy Settings]

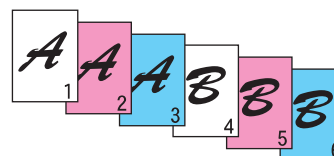
Click this button to configure settings in the [Carbon Copy Settings] window.

Default setting: Not selected

Print job



Result (when [Collate] is selected)



⑥ Output

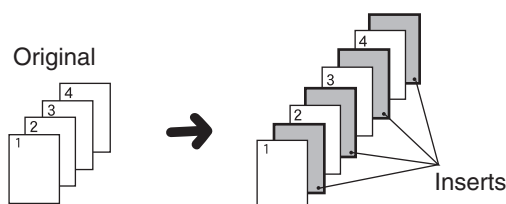
Use this setting to select the output tray. When the stapling function is selected, the centre tray cannot be selected.

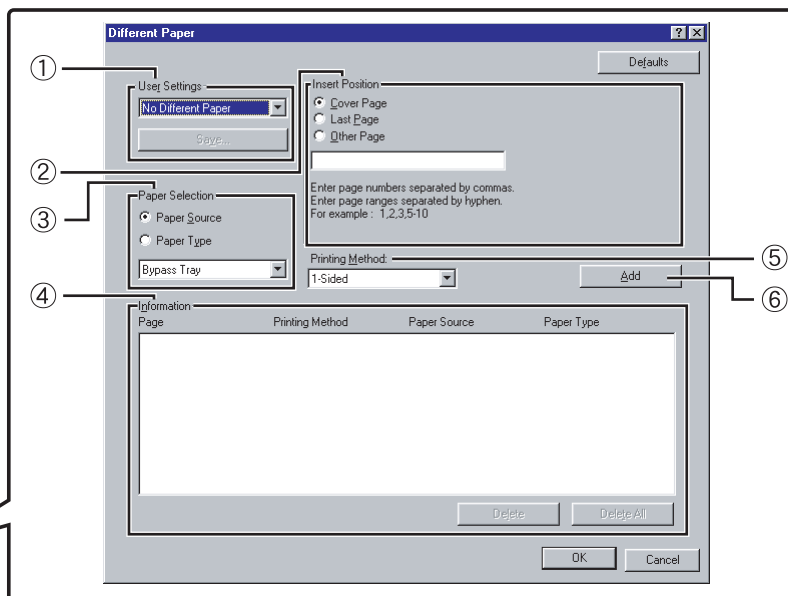
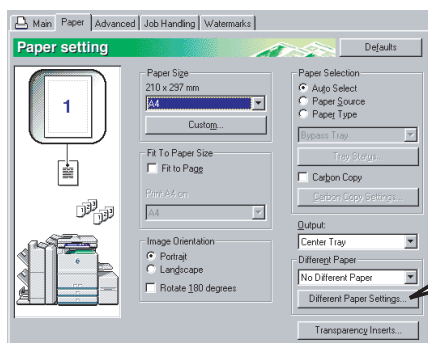
Default setting: Centre Tray

⑦ Transparency Inserts

The printer can be instructed to separate the transparencies by inserting blank sheets of paper. Click this button to open the window for selection of transparency insert settings.

This cannot be selected when two-sided printing, the staple function, or the punch function is selected.





[Different Paper Settings]

These settings are used to print selected pages on a specified type of paper or on paper from a specified tray, or to have blank sheets added as inserts at specified pages.

① User Settings

Up to 30 sets of [Different Paper Settings] can be stored, allowing settings to be changed by simply selecting a set.

Default settings: No Different Paper

[Save]

Click this button to save a set of different paper settings. A [User Settings] window will appear. User setting text entries can be up to 20 characters long. If a [Delete] button appears, a set of user settings can be deleted by clicking this button.

② Insert Position

[Cover Page]

When this is selected, paper from a different paper source or a different type of paper is used for the first page of the print job. Select [Paper Source] or [Paper Type].

[Last Page]

When this is selected, paper from a different paper source or a different type of paper is used for the last page of the print job. Select [Paper Source] or [Paper Type].

[Other Page]

When this is selected, specify the pages where you wish to insert a different type of paper. If the [Printing Method] ⑤ is set to [Blank], the sheet will be inserted in front of the specified page. If [1-Sided] is selected, the specified page will be printed on the front side of the inserted sheet. If [2-Sided] is selected, the specified page and the following page will be printed on the front side and back side of the inserted sheet. Default setting: Cover page

③ Paper Selection

[Paper Source]

Select this if you wish to specify a paper tray to be used for [Insert Position] ②.

[Paper Type]

Select this if you wish to specify a paper type to be used for [Insert Position] ②.

Default setting: Bypass Tray

④ Information

The stored [Different Paper] settings appear here.

[Delete]

Click this button to delete the selected settings in the Information list.

[Delete All]

Click this button to delete all settings in the Information list.

⑤ Printing Method

This is used to select the printing method for a cover page, last page, or other page.

[Blank]

Insert a blank sheet at the specified page.

[1-Sided]

Select this to print only on one side of the paper used for a cover page, last page, or other page. When this is selected for the [Last Page] (back cover), printing takes place on the back side of the sheet.

[2-Sided]

Select this to print on both sides of the paper used for a cover page, last page, or other page.

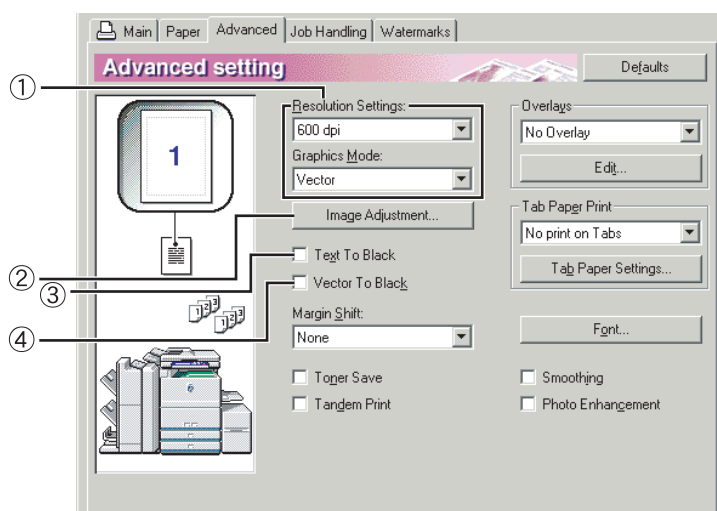
Default setting: No

⑥ [Add]

Click this button to save a set of [Different Paper] settings. The settings will be added to the Information list.

Settings in the [Advanced] tab

The following screen appears when the [Advanced] tab is selected. The settings and buttons in this screen are explained below.



① Image Quality

This item is used to select the [Resolution Settings] and [Graphics Mode] for printing.

[Resolution Settings]

Select 300 dpi or 600 dpi.

Default setting: 600 dpi

[Graphics Mode]

Select [Raster] or [Vector] (HP-GL/2). [Raster] is used to print with raster graphics, and [Vector] is used to print with Vector (HP-GL/2) commands.

Default setting: Vector (HP-GL/2)

② Image Adjustment

This field is used to adjust the brightness and contrast.

[Brightness]

This adjusts the brightness of colours. The brightness can be set from 0 to 100. Colours will appear closer to white as the number is increased.

Default setting: 50

[Contrast]

The contrast can be set from 0 to 100. The higher the number, the higher the contrast.

Default setting: 50

③ Text To Black

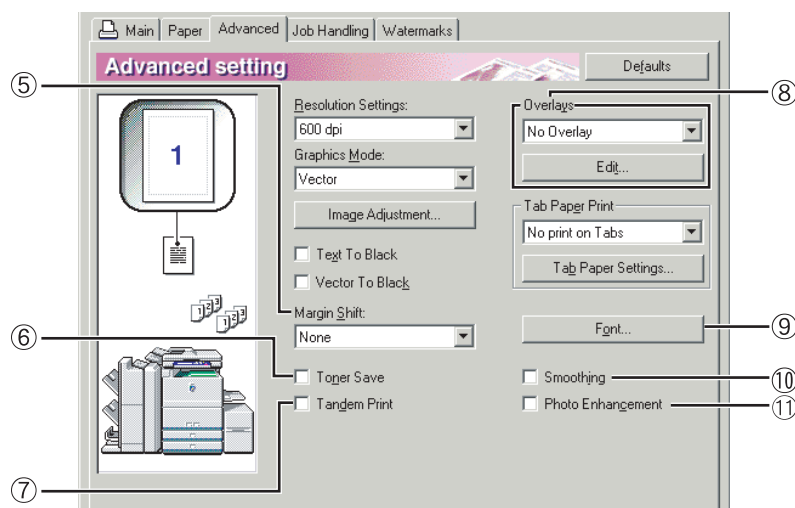
Use this setting to have all text other than white text printed in black. (This setting is useful when printing faint coloured text that is difficult to read.)

Print data	Printing result	
	<input type="checkbox"/> Text To Black	<input checked="" type="checkbox"/> Text To Black

④ Vector To Black

Use this setting to have all lines or areas other than white lines areas printed in black. (This setting is useful when printing faint coloured lines or areas that are difficult to recognize.)

Print data	Printing result	
	<input type="checkbox"/> Vector To Black	<input checked="" type="checkbox"/> Vector To Black

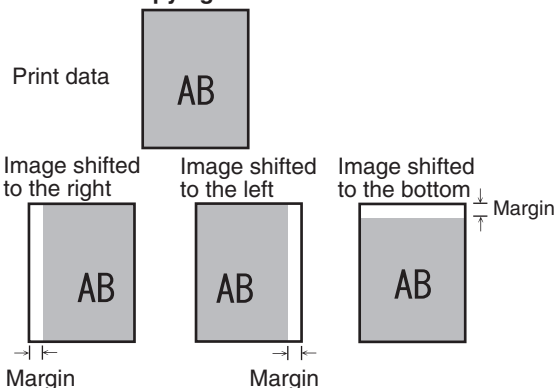


⑤ Margin Shift

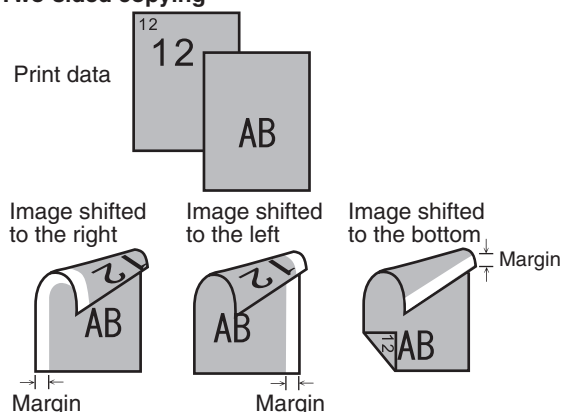
This is used to shift the print image to create margin at the left, right, or top of the paper. Select [None], [10mm.], [20mm.], or [30mm.].

Default setting: None

One-sided copying



Two-sided copying



⑥ Toner Save

Select this to save toner. Solids will be printed in halftone to reduce toner consumption.

⑦ Tandem Print

Two machines that are connected in a system that allows tandem copying (sharing a large copy job between two machines) can also be used for tandem printing. To use tandem printing, settings must be configured in the key operator programs. (See "Tandem setting" in "Network settings" on [page 5-7](#) of the key operator program.)

Default setting: Not selected

To cancel a tandem printing job

Touch the [STOP/DELETE] key in the job status screen of both the server machine and the client machine. Printing will be cancelled and the job deleted.

⑧ Overlays

This function is used to print an image as an overlay on a previously created form. The form must be created before the function can be used. Default setting: Not selected

[Edit]

Click this button to open the overlay settings window. The file selected in this window will be used as the overlay.

⑨ Font

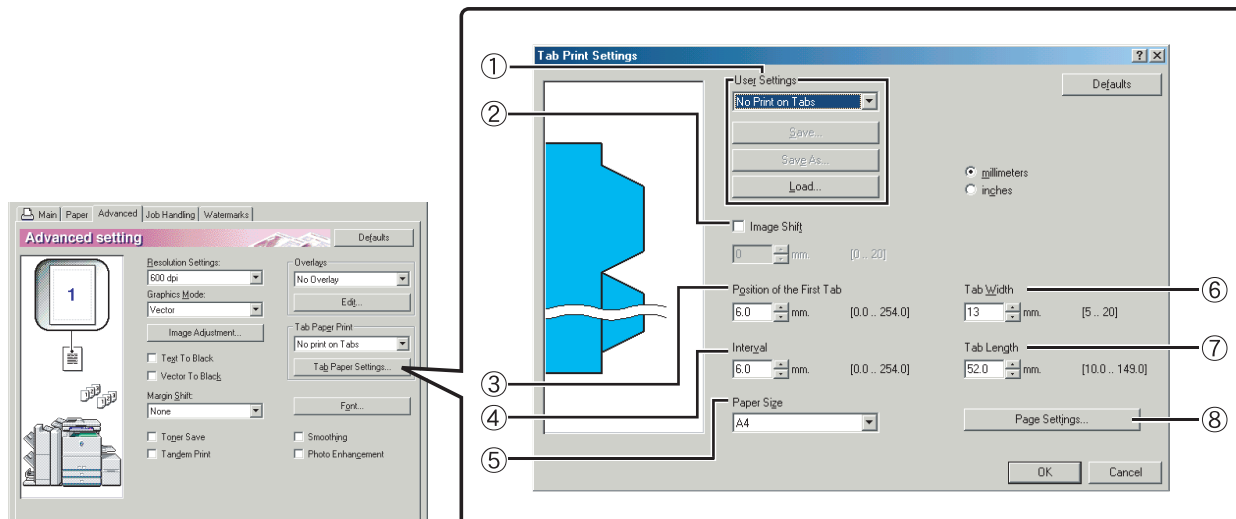
Click this button to configure font settings.

⑩ Smoothing

Check "Smoothing" to smooth the edges of text or graphics and reduce jagged lines in order to obtain virtually high resolution.

⑪ Photo Enhancement

This mode is most useful when printing Photographic Image. The image quality might be down for Line Art.



① User Settings

Up to 25 sets of custom Tab Print Settings can be stored, allowing settings to be selected by simply selecting the name of a set. In addition, five pre-stored sets of tabbed paper settings are available for use as needed.

Default setting: No print on Tabs

[Save]

Click this button to save the Tab Print Settings. The [Tab Paper Print Name] dialog box will open. Up to 20 characters can be entered for the name.

[Save As]

Click this button when you wish to save the Tab Print Settings under a different name or in a different location. The [Save As] dialog box will open.

[Load]

This is used open a file that was saved using [Save As].

② Image Shift

When this setting is selected, the amount of shift of the print area for printing on tabbed paper can be set. This sets how far the print image is shifted from the tabbed side of the paper.

The print image must be created in an application and the number of pages where tabbed paper is to be inserted must be set in [Different Paper Settings] [page 2-8](#) on the [Paper] tab. The shift can be set from 0 to 20 mm.

When this setting is not selected, tabbed paper can be inserted at specific pages of the print job and text can be printed on each tab.

Default setting: Not selected

③ Position of the first Tab

Use this to set the distance to the first tab from the top of the tabbed paper. The distance can be set from 0 mm to 254 mm.

Default setting: 6 mm

④ Interval

Use this to set the interval between tabs on the tabbed paper. The interval can be set from 0 mm to 254 mm.

Default setting: 6 mm

⑤ Paper Size

Use this to specify the paper size of the tabbed paper.

⑥ Tab Width

Use this to set the horizontal width of the tabs. The width can be set from 5 mm to 20 mm.

Default setting: 13 mm

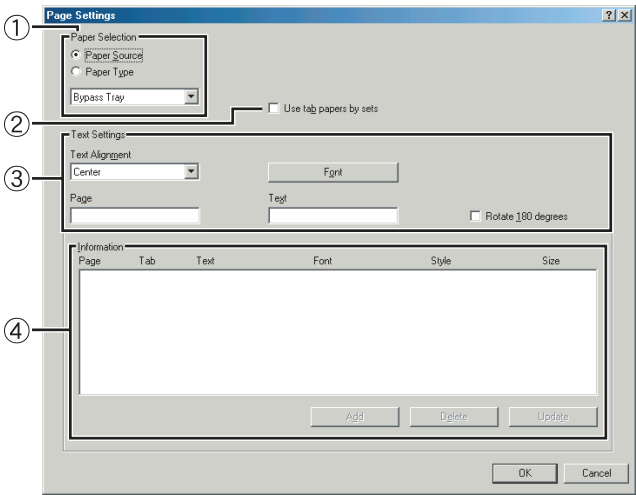
⑦ Tab Length

Use this to set the vertical length of the tabs. The length can be set from 10 mm to 149 mm.

Default setting: 52 mm

⑧ Page Settings

Click this button to open the [Page Settings] dialog box, which is used to enter the text that will be printed on the tabs and to select the pages where tabbed sheets will be inserted ([page 2-12](#)). This is only possible when the [Image Shift] checkbox is not selected.



① **Paper Selection**

When [Paper Source] is selected, the specified paper tray will be used for printing. When [Paper Type] is selected, the tray that has tabbed paper will be used for printing.
Default setting: Paper Source

② **Use tab papers by sets**

When multiple sets of tabbed paper will be used for a print job, the tabbed sheets to be used must normally be calculated and placed in the bypass tray or tray 3.
However, when this setting is selected, it is not necessary to calculate the sheets to be used.
For example, if one set of tabbed paper consists of 5 sheets and insertion of 8 tabbed sheets at specific pages of the print job is selected in [Page] below, 2 tabbed sheets will be left over after the first set of copies of the print job is printed. These two sheets will then be ejected so that insertion in the next set of copies begins from the first tabbed sheet of the next set of tabbed sheets.
Default setting: Not selected

③ **Text Settings**

This field is used to enter the text to be printed on the tabs and the pages at which tabbed sheets are to be inserted.

[Text Alignment]

This is used to set the alignment of the text on the tabs. Select [Left], [Center], or [Right].
Default setting: Center

[Page]

Enter the page numbers where tabbed sheets are to be inserted. Separate each page number by a comma. Use a hyphen to specify continuous pages.
Example: 1,2,3,5-10

[Font]

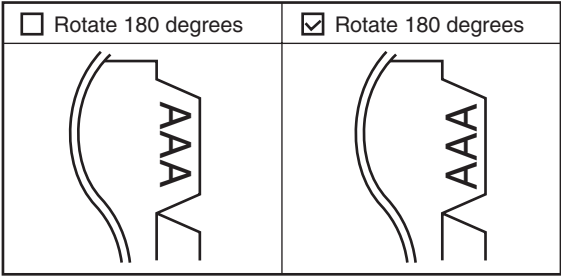
Click this button to select font settings.

[Text]

Enter the text to be printed on the tabs. Up to 50 characters can be entered.

[Rotate 180 degrees]

Select this checkbox to rotate the text on the tabs 180 degrees.
Example:



④ **[Information]**

Shows the settings selected in [Text Settings].

[Add]

Click this button to add the settings in [Text Settings] to [Information].

[Delete]

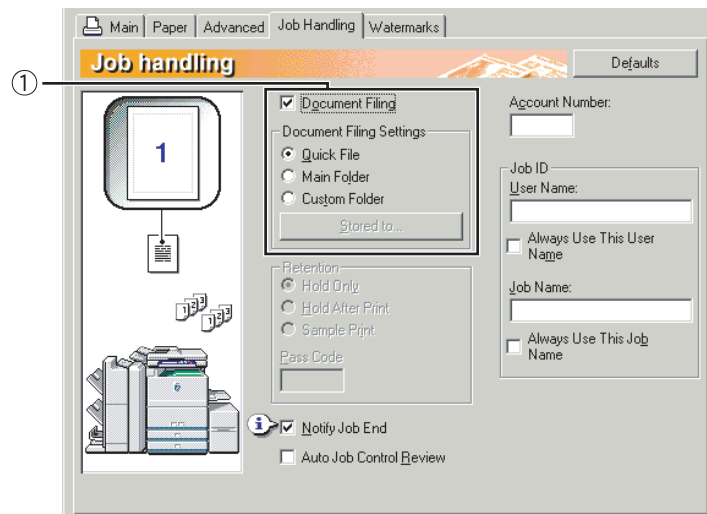
Click this button to delete a selected setting from [Information].

[Update]

If you make any changes to the settings that appear in [Information], click this button to update [Information].

Settings in the [Job Handling] tab

The following window appears when the [Job Handling] tab is clicked. The settings and buttons are explained below.



① Document Filing

This setting is used to save a print job as a data file in the hard disk of the machine. Two methods of saving the image are available: Automatic temporary saving [Quick File], [Main Folder] and [Custom Folder]. The saved image can be called up as needed and printed or otherwise manipulated. A name (user name, file name, etc) can be assigned to the file for easy searching.

For information on using this function at the operation panel of the machine, see chapter 7, "Document filing function", of the "Operation manual (for general information and copier operation)".

Default setting: Not selected.

[Quick File]

This setting is used to have a print job automatically saved to the automatic temporary save folder when printing is finished. A user name and job name can assigned to the file ([page 2-15](#)); however, the job cannot be saved as a confidential file with a password ([page 2-14](#)).

[Main Folder]

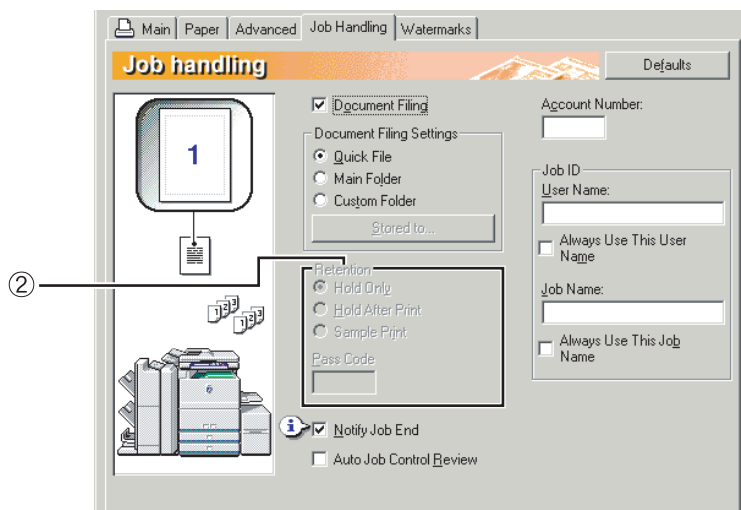
Select this when you wish to save a print job in the machine's "Main Folder". A user name and job name ([page 2-15](#)) can be assigned to the file. A confidential print job can be saved in this folder with a passcode ([page 2-14](#)).

[Custom Folder]

Select this when you wish to save a print job in the machine's "Custom Folder". A user name and job name ([page 2-15](#)) can be assigned to the file. A confidential print job can be saved in this folder with a passcode ([page 2-14](#)).

[Stored to]

When "Custom Folder" is selected, click this button to open the "Stored to" window. This window is used to select the folder for saving the file, and to enter a passcode if one has been established for the folder. The folder (Main Folder or Custom Folder) is selected from the list in the "Folder Selection" screen. "🔒" appears next to folders that have passcodes.



② Retention

[Hold Only]

This setting is used to prevent a print job from being misplaced. When a print job is sent to the computer, the machine will hold it in a Filing folder without printing it. The user can initiate printing as needed using the operation panel of the machine. The job can also be deleted without printing it.

[Hold After Print]

This setting is used to hold a print job in a Filing folder after it is printed. The file can be printed again or deleted as needed.

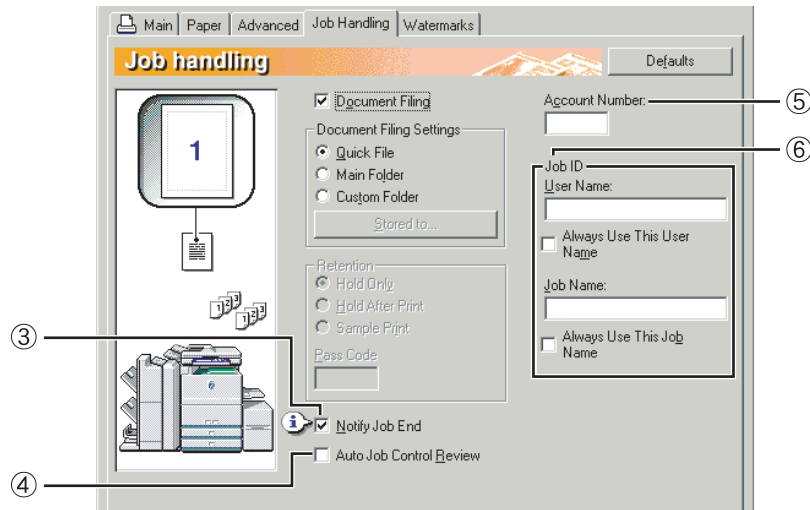
[Sample Print]

This setting is used to prevent the occurrence of excessive misprints when printing a large number of copies. When this setting is selected and a print job is sent to the machine, only the first set of copies is printed and then the job is stored in a Filing folder. After checking the first set of copies to make sure that the margins, staple positions, and other aspects of the job are satisfactory, the user initiates printing from the operation panel of the machine and the remaining sets are printed. (The sample set is included in the total number of sets.) If the sample set is not satisfactory, the job can be deleted.

[Pass Code] (5-digit number)

To require that a passcode be entered at the operation panel of the machine to print a job stored in a Filing folder, enter the passcode (5-digit number) in [Pass Code].

- **When a passcode is set in "Hold Only" mode**
The passcode must be entered at the operation panel of the machine to print the job.
- **When a passcode is entered in "Hold After Print" mode**
After the initial printing, the passcode must be entered at the operation panel of the machine to print the job again.
- **When a passcode is set in "Sample Print" mode**
After printing the sample set, the passcode must be entered at the operation panel of the machine to print the remaining sets.
Default setting: Hold Only



③ Notify Job End

This is used to select whether or not you wish to be notified when a print job is finished. This setting is only effective when the printer status monitor is running.

If the printer status monitor is not running, the setting will not operate even if selected.

Default setting: Selected

④ Auto Job Control Review

Select this to have the job control screen always open when printing from the printer driver.

Default setting: Not selected

⑤ Account Number

When "Auditing mode" is enabled in the key operator programs, a count is kept of the number of pages printed by each account. Enter your account number for printing that was established in the key operator programs. To establish account numbers, see the key operator program manual.

If a limit for the number of pages that your account can print is set in the key operator programs, printing will not be possible after the limit is reached. If "Prohibit notice page printing" is disabled in the key operator programs, a Notice Page will be printed. (The Notice Page is initially set to not print out.)

If "Cancel jobs of invalid accounts" is enabled in the key operator programs and an incorrect account number or no account number is entered, printing will not take place. If you do not wish to restrict use of the machine, disable the setting. Pages printed without entering a valid account number will be added to the "OTHERS" count.

⑥ Job ID

Use this to set the default user name and job name that appear in the operation panel of the machine. Note that if [Always Use This User Name] and [Always Use This Job Name] are not selected, your Windows login name and the file name selected in the application will be automatically used. The names that appear in the dialog box that appears when printing is executed will appear in the operation panel of the machine.

[User Name]

Use this to set the default user name that appears in the operation panel of the machine. Note that if [Always Use This User Name] is not selected, your Windows login name will be automatically used. The name that appears in [Job ID] in the [Job Control] window (which appears when printing is executed) will appear in the operation panel of the machine. Up to 16 characters can be entered for the name.

[Always Use This User Name]

Select this checkbox to have the [User Name] entered in this window appear in the operation panel of the machine. If not selected, your Windows login name will be automatically used.

Default setting: Not selected

[Job Name]

Use this to set the default job name that appears in the operation panel of the machine. Note that if [Always Use This Job Name] is not selected, the file name selected in the application will be automatically used. The name that appears in [Job ID] in the [Job Control] window (which appears when printing is executed) will appear in the operation panel of the machine. Up to 30 characters can be entered for the name.

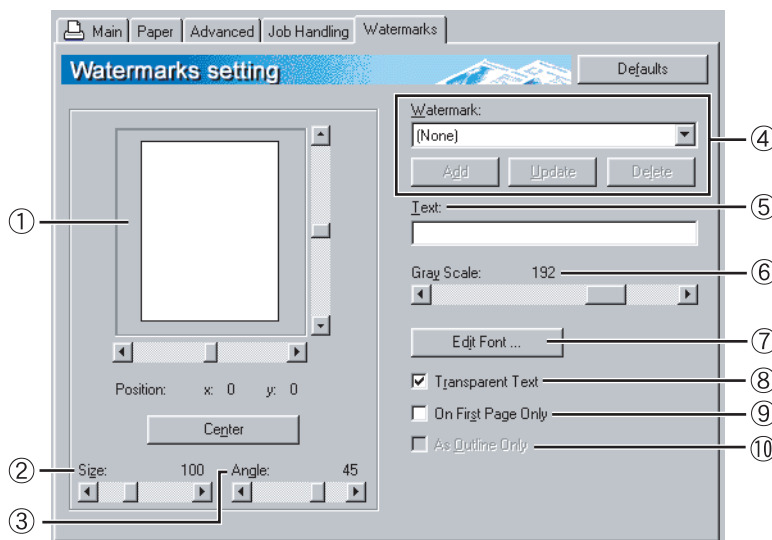
[Always Use This Job Name]

Select this checkbox to have the [Job Name] entered in this window appear in the operation panel of the machine. If not selected, the file name selected in the application will be automatically used.

Default setting: Not selected

Settings in the [Watermarks] tab

The following window appears when the [Watermarks] tab is clicked. The settings and buttons are explained below.



① Watermark preview

The watermark function is used to print a watermark (a faint, shadowlike text image) on the paper. This shows a preview of the currently selected watermark.

The position of the watermark can be adjusted by directly dragging the image with your mouse, or by using the scrollbars at the right and bottom of the preview screen.

Default setting: x: 0, y: 0

NOTE

The image that appears in the Watermark Preview is an approximate representation of what will appear in the print.

[Center]

Select this setting to have the watermark printed in the centre of the paper.

② Size

Use this setting to adjust the size of the characters of the currently selected watermark.

Any number from 6 points to 300 points can be selected.

Default setting: 200 (points)

③ Angle

Use this setting to adjust the angle of the text of the currently selected watermark.

Select any angle from -90° to 90°.

Default setting: 45°

④ Watermark

Select a watermark from the watermarks that appear in the box.

Default setting: None

[Add]

Click this button to create a custom watermark.

[Update]

Click this button to adjust the size or angle of the text of a stored watermark.

[Delete]

Click this button to delete a stored watermark.

⑤ Text

When you wish to create a custom watermark, enter the text of the watermark here. Up to 100 characters can be entered. To store the entered text as a watermark, click the [Add] button explained in ④ above.

⑥ Grey Scale

Use this setting to adjust the colour of the font of the currently selected watermark.

Any value from 0 to 255 points can be selected.

Default setting: 192 points

⑦ Edit Fonts

Use this setting to select the font of the currently selected watermark.

⑧ Transparent Text

Select this checkbox when you wish to have the characters of the watermark printed faintly in the background of the text.

Default setting: Selected

⑨ On First Page Only

Select this checkbox when you want to have a watermark printed on only the first page of a print job.

Default setting: Not selected

⑩ As Outline Only

Select this checkbox when you want to print only the outline of the characters of a watermark.

Default setting: Not selected

This setting cannot be selected when setting ⑧ is selected.



CHAPTER 3

WEB PAGES IN THE PRINTER

This chapter explains various functions that allow you to access the Web pages in the printer from your computer.

	Page
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• Directly printing a file on an FTP server.....	3-9

REMOTE OPERATION VIA A NETWORK

You can use a Web browser such as Netscape Navigator or Internet Explorer on your computer to access the Web page in the machine and configure settings.

Environment Required to Access the Web Page

You must have either of the following Web browsers to access the machine's Web page:

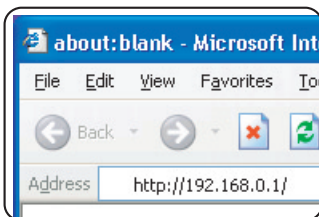
- Optional print server card (network interface card)
- Recommended Web browser
 - Internet Explorer: 5.5 or higher (Windows), 5.1 or higher (Macintosh)
 - Netscape Navigator: 6.0 or higher (or equivalent)

How to access the Web page and view Help

Follow these steps to access the Web page. To view explanations of the function settings that can be configured remotely via the network using the machine's Web page, click the "General" button or the "Document Filing" button in Help in the menu frame.

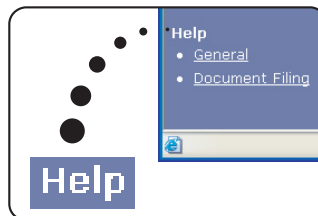
1 Start your Web browser on your computer.

2 In the Address box in your Web browser, enter the IP address that is programmed in the machine.



To check the IP address, see [page 5-7](#).

3 Click the "General" button or the "Document Filing" button in Help in the menu frame.




The Help page provides detailed explanations of the settings.

4 Close the Help page



In the menu frame, select a setting that you wish to configure.

When you have finished using the Web page, click the  (close) button in the top right corner of the page.



The Web page will open. (The settings in the Web page are explained on the next page.)

Items in the menu frame of the Web page

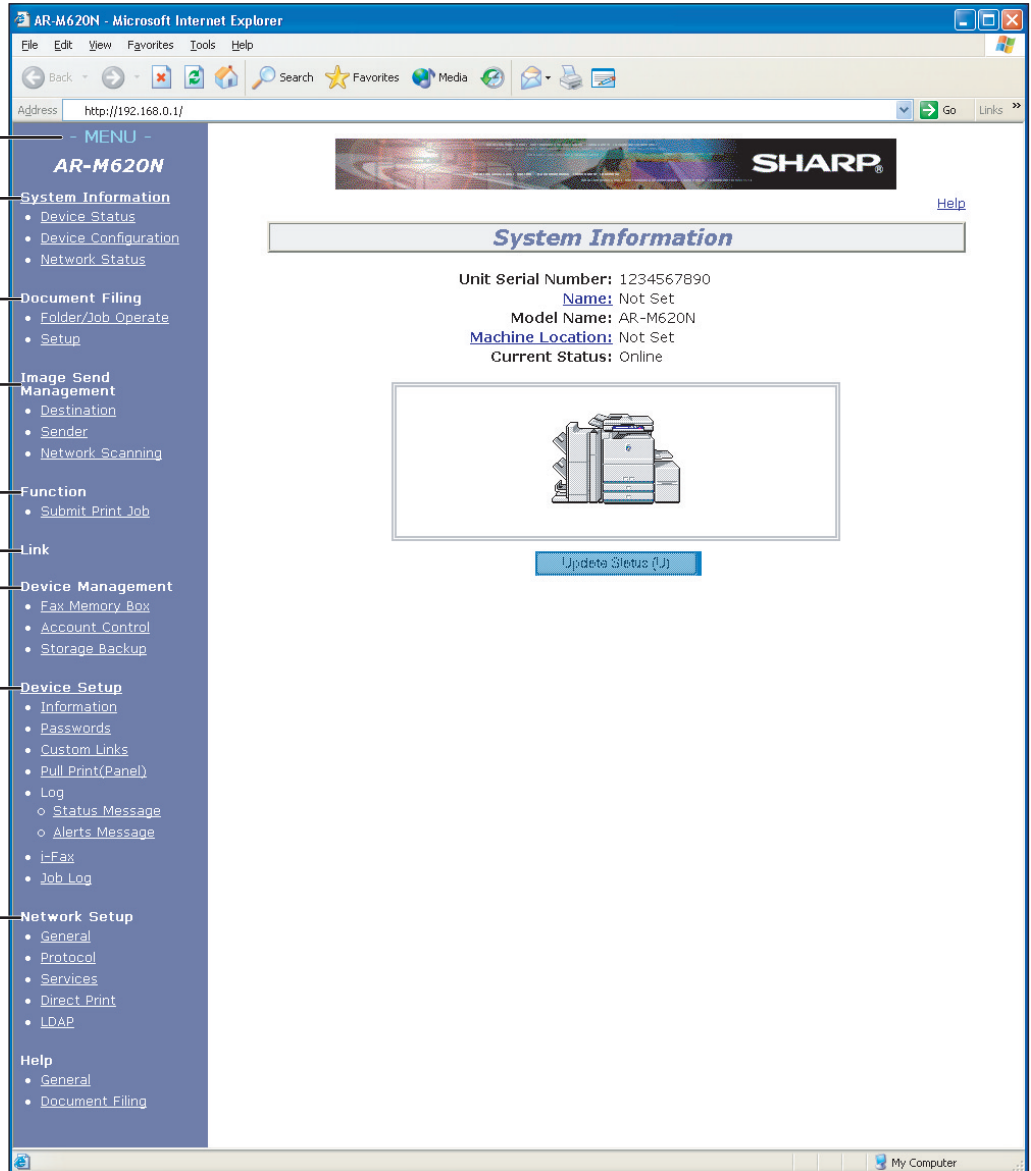
Click items in the menu frame and configure the settings as needed. Some settings may require a password. Only a network administrator should configure these settings ([page 3-5](#)).

When you have finished configuring a setting, be sure to click [Submit] to store the setting. For more information on settings, click [General] in [Help] in the menu frame.

Menu frame

Click a setting in the menu to configure it.

- ① **System Information**
 - [Device Status](#)
 - [Device Configuration](#)
 - [Network Status](#)
 - ② **Document Filing**
 - [Folder/Job Operate](#)
 - [Setup](#)
 - ③ **Image Send Management**
 - [Destination](#)
 - [Sender](#)
 - [Network Scanning](#)
 - ④ **Function**
 - [Submit Print Job](#)
 - ⑤ **Link**
 - ⑥ **Device Management**
 - [Fax Memory Box](#)
 - [Account Control](#)
 - [Storage Backup](#)
 - ⑦ **Device Setup**
 - [Information](#)
 - [Passwords](#)
 - [Custom Links](#)
 - [Pull Print\(Panel\)](#)
 - [Log](#)
 - [Status Message](#)
 - [Alerts Message](#)
 - [i-Fax](#)
 - [Job Log](#)
 - ⑧ **Network Setup**
 - [General](#)
 - [Protocol](#)
 - [Services](#)
 - [Direct Print](#)
 - [LDAP](#)
- Help**
- [General](#)
 - [Document Filing](#)



① System Information

This is used to view system information, the status of the devices, the device configuration, and the network status. This page is view-only; names and locations cannot be changed in the page.

■ Device Status

Shows the current status of the machine, paper trays, output trays, toner and other supplies, and page counts. Out of paper and other warnings appear in red.

■ Device Configuration

Shows what options are installed. This includes optional paper sources, optional output devices, hardware options, memory, and software options.

■ Network Status

Shows the network status. Information on "General", "TCP/IP", "Netware", "AppleTalk", and "NetBEUI" is shown on the respective pages.

② Document Filing

Jobs stored on the hard disk using the Document Filing function can be printed, transmitted, and deleted. Folders on the hard disk can be added and deleted.

■ Folder/Job Operate

The Quick File folder is used to automatically save a finished job. The standard folder and user folders are for manual use by users. Jobs in these folders can be manipulated.

■ Setup

This is used to view and configure users, job settings, automatic saving in the Quick File folder, key operator rights settings, and hardware usage.

③ Image Send Management

This is used to configure settings for image transmission.

■ Destination

Store, edit, and delete destinations for each function (Scan to E-mail, Scan to FTP, Scan to Desktop, fax, and Internet fax). The address of each destination, the name, and the name that appears in the operation panel are stored. Groups of destinations can also be programmed as a convenient means of sending same image to a group of destinations.

■ Sender

Store, edit, and delete senders. Up to 999 senders can be stored. The name, e-mail address, and other information is stored.

■ Network Scanning

Configure basic settings for the network scanner function. Control settings, the Scan to E-mail subject, file names, and index names for the touch panel are configured.

④ Function

This can be used to send print jobs to the machine.

■ Submit Print Job

A file name can be entered to print a specified file. If the file does not include print settings, print settings can be selected in this page ([page 3-8](#)).

⑤ Link

When a custom user link has been added using the custom link function explained on the next page, the link appears here.

⑥ Device Management

This menu supports device functions.

■ Fax Memory Box

Create, Edit, and Delete fax memory boxes. Fax memory is an area on the hard disk used for polling memory, confidential reception, and relay broadcast transmission. A total of 100 boxes can be created for all three functions.

■ Account Control

View account control information and program account numbers.

Account control information shows the number of pages printed in each mode (copying, printing, etc.) by each account. Account numbers can be programmed, edited, and deleted, and page limits can be set for each account or all accounts.

■ Storage Backup

This allows settings to be exported for backup on an external device.

⑦ Device Setup

Configure system parameters and function options.

■ Information

Store machine information such as the name, machine code, and location. This information will appear on status and alert messages.

■ Passwords

Passwords can be set to restrict Web page access and protect settings. The administrator must change the password from the factory default setting. Also the administrator must remember the new password. The password is required to operate the settings on the password-protected screen.

A password can be set for the administrator and passwords can be set for each user. If you use a user password, you will not be able to establish settings in the Setup menu.

The passwords for "User" and "admin" are both initially set to "Sharp". If you wish to change the passwords when first establishing the settings, enter "Sharp" in "Admin Password" before you establish the settings. A password must consist of alphanumeric characters and be no more than seven characters long. Passwords are case sensitive. After entering a password, click "Submit" to set it. After setting the password, turn the machine power off and then back on.

When a password is set, you will be prompted for the password when you attempt to access a Web page with protected settings. For the "User name", enter "user" if you are accessing the page as a user, or "admin" if you are accessing the page as an administrator. For detailed information on setting passwords, refer to "General" under "Help".

■ Custom Links

Set custom links that appear in the menu frame. Links set here are added to the menu. Up to five user custom links can be stored.

■ Pull Print (Panel)

PDF and TIFF files can be printed directly from the operation panel without using the printer driver. Use this setting to enter FTP servers where files are stored. Up to four FTP servers can be entered ([page 3-9](#)).

■ Status Message

Use this to have count information such as the number of pages printed in copy and printer modes sent on a specified schedule. Enter the destination e-mail addresses for the messages and the transmission schedule.

■ Alerts Message

Use this to have error alerts such as out of paper, out of toner, failures, and paper misfeeds sent to specified e-mail addresses.

■ i-Fax

Configure settings for sending and receiving faxes over the Internet.

■ Job Log

A log is kept of jobs run on the machine. This is used to write the log file to a computer in CSV format.

⑧ **Network Setup**

Configure network protocol, Direct Print, and LDAP settings.

■ **General**

Configure settings in the [GENERAL] and [Filter] screens.

■ **Protocol**

Configure settings in the [TCP/IP], [NetWare], [AppleTalk] and [NetBEUI] screens.

■ **Services**

Configure settings in the [DNS], [WINS], [SMTP], [SNMP] and [Kerberos] screens.

DNS and SMTP are required for e-mail.

■ **Direct Print**

Configure settings in the [Raw Print] and [E-mail Print] screens.

"E-mail Print" is used to send e-mails with attachments to the machine and have the machine print the attachments without the need for the printer driver. To use this function, the machine's e-mail account information must be configured in the machine ([page 3-7](#)).

■ **LDAP**

LDAP is required when using an LDAP server and when using user authentication for the network scanner function.

E-mail Print

When an e-mail account is set up for the machine, this function is used to have the machine periodically check the mail server and automatically print attachments to e-mails it receives without the need for the printer driver.

■ Configuring E-mail print settings

To use E-mail Print, the machine's e-mail account information must be configured in the machine. Follow these steps:

1 Click [Direct Print] in the link menu of the menu frame.

The "Direct Print Setup" page appears.

2 Click [E-mail Print].

3 Enter the E-mail print information.

For explanations of the settings, click the [General] button in the [Help] in the menu frame.

4 Click [Submit] and store the entered information.

■ Using E-mail Print

In the "To:" line of your e-mail program, enter the e-mail address of the machine, attach the file that you wish to print, and send the e-mail

Files with the extensions pcl, ps*, pdf*, tiff, and tif can be printed.

*The optional PS3 extension kit is required.

The number of copies and other settings can be specified by entering control commands in the message of the e-mail. The following control commands can be entered:

Function	Command	Values	Example
Number of copies	COPIES	1-999	COPIES=2
Staple	JOBSTAPLE	STAPLENO, STAPLELEFT	JOBSTAPLE=STAPLENO
Two-sided printing	DUPLEX	OFF, TOP, LEFT, RIGHT	DUPLEX=TOP
Account number	ACCOUNTNUMBER	5-digit number	ACCOUNTNUMBER=11111
File type	LANGUAGE	PCL, PCLXL, POSTSCRIPT, PDF, TIFF	LANGUAGE=TIFF
Paper	PAPER	Useable paper type (such as A4)	PAPER=A4
Quick File	QUICKFILE	OFF, ON	QUICKFILE=ON

NOTES

- Specify "Text" for the format of the e-mail message. If rich text format (HTML) is used, the entered commands will be disregarded.
- To receive a list of the control commands, send an e-mail with "config" entered in the message.
- If nothing is entered in the message, printing will take place according to the settings in "PRINTER CONDITION SETTINGS" in the "PRINTER DEFAULT SETTINGS" menu of the user settings.
- To print PS and PDF files, the PS3 expansion kit is required.
- An encrypted PDF file cannot be printed.
- Only specify a file type when specifying a page description language. Normally a file type does not need to be specified.

Directly printing a file on a computer

The address of a file that can be accessed from your computer can be specified to directly print the file without using the printer driver.

In addition to files on your computer, files on any other computer on the same network that can be accessed from your computer can be printed in this way.

To directly print a file on a computer, follow these steps:

1 Click [Submit Print Job] in the link menu of the menu frame.

The "Submit Print Job" page appears.

2 Select print settings in [Job Detail].

For explanations of the settings, click the [General] button in the [Help] in the menu frame.



3 Enter the address of the file that you wish to print in [Enter Filename].

You can also click [Browse] to browse for the file.

For more information, click the [General] button in the [Help] in the menu frame.

4 Click [Print].

Printing begins.

Directly printing a file on an FTP server

A FTP server can be stored in the machine to enable direct printing of a file on the FTP server from the operation panel of the machine without using the printer driver.

Files with the extensions pcl, ps*, pdf*, tiff, tif, and prn can be printed.

*The PS3 expansion kit is required.

■ Storing an FTP server

To directly print a file on an FTP server, the FTP server must be stored.

Follow these steps:

1 Click [Pull Print (Panel)] in the link menu of the menu frame.

The "Pull Print (Panel)" page appears.

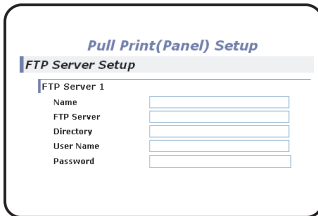
2 Store the FTP server information in [FTP Server Setup].

For more information, click the [General] button in the [Help] in the menu frame.

3 Enter the FTP server information.

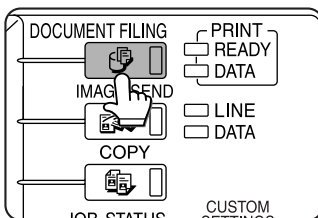
For more information, click the [General] button in the [Help] in the menu frame.

4 Click [submit] to store the entered information.

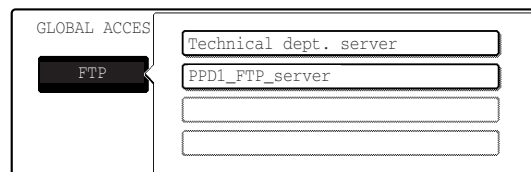


■ Printing a file on an FTP server from the operation panel of the machine

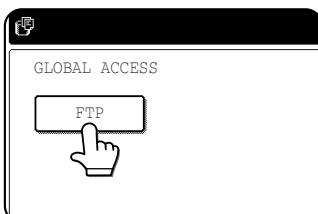
1 Press the [DOCUMENT FILING] key twice to display the global access screen.



3 Select the desired FTP server.

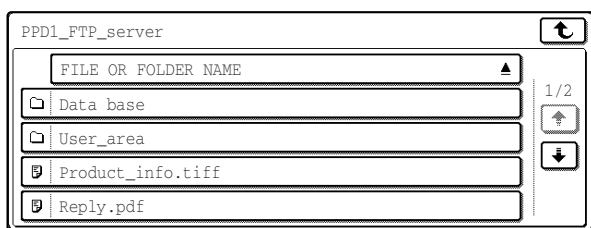


2 Touch the [FTP] key.



This screen will not appear if an FTP server has not been stored.

4 Select the desired file or folder name.



If the file or folder does not appear in the screen, press the or key until it appears.

To return to the global access screen, touch the key.

When a file name () is touched, the print screen appears (step 5).

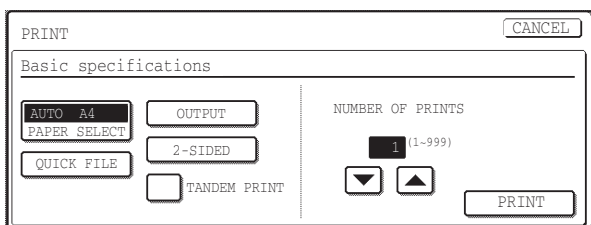
When a folder () is touched, all files in the folder appear. Touch the desired file. At this time, and appear in the upper right of the screen.

Touch to move up to the preceding folder.

Touch to move up to the root folder.

To change the order of display, touch "FILE OR FOLDER NAME".

5 Select print settings in the print screen.



Print settings can be changed in this screen before printing. For more information on the print settings, see page 7-16 of the operation manual (for general information and copier operation).

The image printed here can be saved in the quick file folder by touching the [QUICK FILE] key.

6 Touch the [PRINT] key.

Printing begins. When printing finishes, you will return to the screen of step 4.



CHAPTER 4

PRINTER BASIC SETTINGS

This chapter describes the printer configuration settings.

	Page
MAKING CONFIGURATION SETTING	4-2
• Operation procedure common to all printer configuration settings (items that can be set from the operation panel).....	4-2
• Printer Default settings.....	4-4
• PCL settings.....	4-5
• PostScript settings	4-5

MAKING CONFIGURATION SETTING

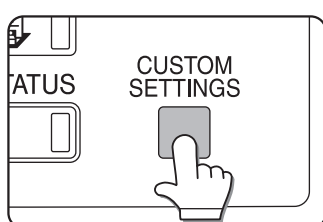
The printer configuration setting allows basic printer settings to be made. The items set with the printer configuration settings are shown below.

- Printer default settings Basic settings used in printing (See [page 4-4](#).)
- PCL settings Sets a PCL symbol set. (See [page 4-5](#).)
- PostScript settings* Sets whether a PostScript error page is printed or not when a PostScript error has occurred. (See [page 4-5](#).)

* An optional PS3 expansion kit is needed.

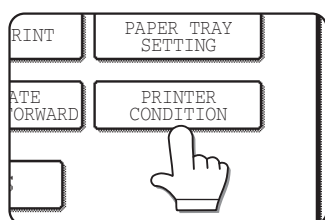
Operation procedure common to all printer configuration settings (items that can be set from the operation panel)

- 1 Press the [CUSTOM SETTINGS] key.

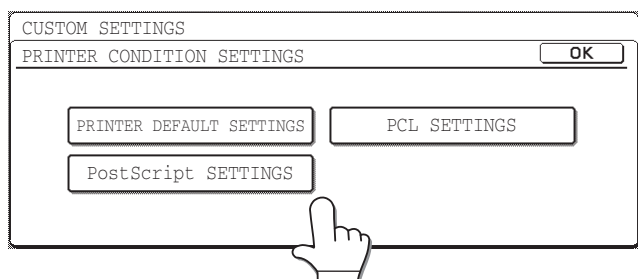


The custom setting menu screen will appear.

- 2 Touch the [PRINTER CONDITION] key on the custom setting menu screen to display the printer condition setting menu screen.

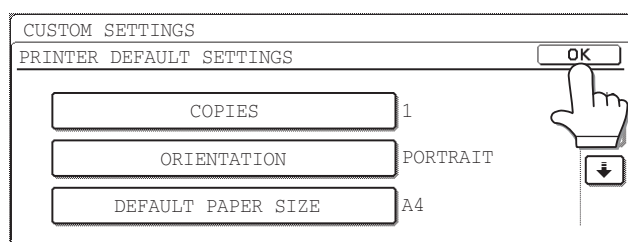


- 3 Touch the key of the desired item to display its setting screen.



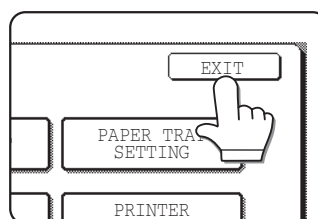
Detailed descriptions for configuration settings start on the [page 4-4](#).

- 4 Touch the desired setting item on the screen and touch the [OK] key.

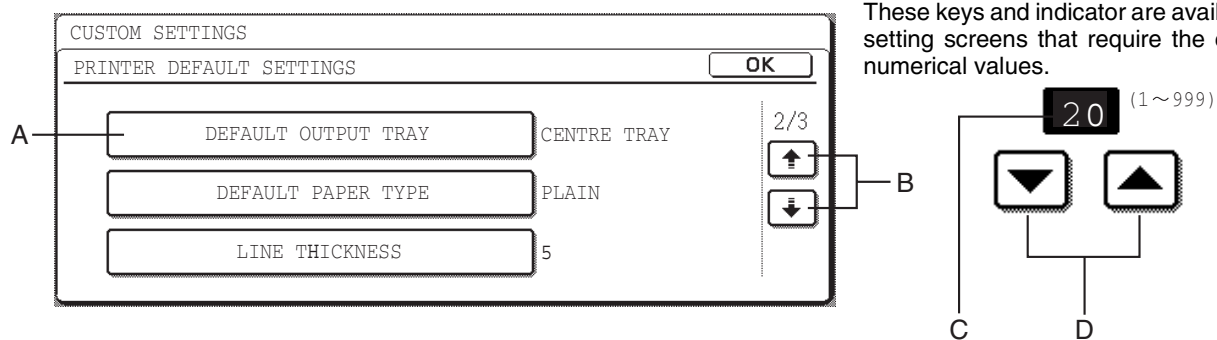


To set another item, repeat steps 3 and 4.

- 5 To finish the setting operation, touch the [EXIT] key.



Supplementary explanation of key operation for configuration setting



These keys and indicator are available on setting screens that require the entry of numerical values.

- A The name of the program category or particular item to be set will appear on the touch key. A touch of the key will select the item displayed.
- B If the settings continue on the following screen(s), touch the and keys to move back and forth through the screens. To return to the category selection screen, touch the [OK] key.
- C The currently set numerical value is displayed.
- D Numerical values can be set by touching the and keys.

Printer Default settings

The default settings are used to set specific print conditions for printing in an environment where the print driver is not used (such as printing from MS-DOS or from a computer that does not have the provided print driver installed).

NOTE

When some items can be set both in the printer driver and on the operation panel, the values set in the printer driver override those set on the operation panel. For items that can be set in the printer driver, perform the settings in the printer driver.

The following settings are available:

■ Copies

COPIES sets the number of print to make.

Default setting: 1

The number of copies can be set from 1 to 999.

■ Orientation

ORIENTATION allows portrait orientation or landscape orientation to be selected for printing.

Default setting: PORTRAIT

PORTRAIT or LANDSCAPE can be set.

■ Default paper size

The paper size to be used for printing under normal conditions is set.

Printing will be performed on the specified size of paper unless otherwise specified.

Default setting: A4 or 8-1/2X11

A3, B4, A4, B5, A5, 11X17, 8-1/2X14, 8-1/2X13, 8-1/2X11, 7-1/4X10-1/2 or 5-1/2X8-1/2 can be set.

■ Default output tray

The output tray to be used for printing under normal conditions is set. Printed sheets will be output to the specified tray unless otherwise specified by application software.

Default setting: CENTRE TRAY

The trays that can be selected depend on installation of peripheral devices.

■ Default paper type

The paper type to be used for printing under normal conditions is set. Printing will be performed on the specified type of paper unless otherwise specified.

Default setting: PLAIN

PLAIN, PRE-PRINTED, RECYCLED, LETTER HEAD, PRE-PUNCHED or COLOUR can be set.

■ 2-SIDED PRINT

Printing mode, 1-SIDED or 2-SIDED, to be used for printing in the normal condition is set.

Default setting: 1-SIDED

1-SIDED, 2-SIDED (BOOK) or 2-SIDED (TABLET) can be set.

■ Smoothing

SMOOTHING reduces jaggies seen at roundish curved portions of characters and images to be printed and improves pseudo resolution.

Default setting: On

Smoothing on or off can be selected.

NOTE

This function is not available on the AR-M700U and AR-M700N models.

■ Line thickness

This setting is used to adjust the line width of vector graphics. For example, if you desire a finer line, select a value from 0 to 4. If you desire a thicker line, select a value from 6 to 9. To return to the standard line thickness, select 5. Use this setting for special applications such as CAD when lines do not appear with sufficient clarity. For regular applications, there is usually no need to change the setting.

Default setting: 5

The relation between the setting values and the change of line thickness are as follows.

Value	0	1	2	3	4	5	6	7	8	9
Thickness change	1 dot *1	50%	75%	90%	95%	100%	105%	110%	125%	150%

*1 All lines are 1-dot lines.

PCL settings

■ PCL symbol set setting

This setting is used to select which country's characters are used for certain of the symbols in the character code table of the PCL symbol set. (Use this setting when you need to select symbols that differ by country.)

Default setting: "3" (PC-8)

See [page 7-4](#) for the symbol set settings.

You can also print the "PCL SYMBOL SET LIST" in "LIST PRINT" (see page 2-15 of "Operation manual (for general information and copier operation)") for a table that shows correspondences between numeric values and symbol sets.

■ PCL font setting

This setting is used to select the font for printing.

Default setting: "0" (Courier) (resident font)

If the optional extended font kit is installed, you can also select from these fonts. In addition, the "PCL INTERNAL FONT LIST" in "PRINTER TEST PAGE" of "LIST PRINT" (see page 2-15 of "Operation manual (for general information and copier operation)") can be printed.

When the optional extended font kit is installed, the "PCL EXTENDED FONT LIST" can be printed.

■ PCL LINE FEED CODE

This setting is used to select how the printer responds when a line break command is received.

Default setting: 0.CR=CR; LF=LF; FF=FF

■ WIDE A4

When this setting is enabled, up to 80 characters can be printed on one line of A4 size paper using 10 CPI font (8 bit characters). When disabled, up to 78 characters can be printed.

Default setting: Disabled

PostScript settings

This setting specifies whether an error page describing the cause of an error is printed or not when a PostScript error has occurred.

Selections are available to choose printing or not printing of error pages.

Default setting: Not print



CHAPTER 5

KEY OPERATOR PROGRAMS

This chapter explains the key operator programs for the printer function. Key operators should read this chapter to ensure correct use of the key operator programs.

	Page
KEY OPERATOR PROGRAMS.....	5-2
• Key operator program list.....	5-2
• Procedure for using key operator programs.....	5-3
• Key operator program menu	5-4
DESCRIPTION OF SETTING PROGRAMS.....	5-5
• Printer settings	5-5
• Network settings.....	5-7

KEY OPERATOR PROGRAMS

Key operator programs related to the printer function are explained here. For key operator programs for general use of the machine, see the key operator's guide.

NOTE

The key operator programs that can be accessed depend upon how the product is configured with optional equipment.

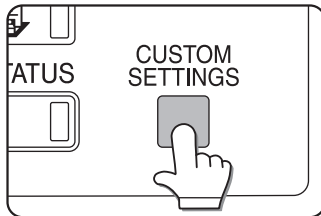
Key operator program list

Program name	Page
Printer settings	
Default settings	
Prohibit notice page printing	5-5
Print density level	5-5
Prohibit test page printing	5-5
A4/letter size auto change	5-5
Interface settings	
Hexadecimal dump mode	5-5
I/O timeout	5-5
Enable parallel port	5-6
Parallel port emulation switching	5-6
Enable USB port	5-6
USB port emulation switching	5-6
Enable network port	5-6
Network port emulation switching	5-6
Port switching method	5-6
Parallel port ECP setting	5-6
Network settings	
IP address setting	5-7
Enable TCP/IP	5-7
Enable NetWare	5-7
Enable EtherTalk	5-7
Enable NetBEUI	5-7
Reset the NIC	5-7
Tandem setting	5-7

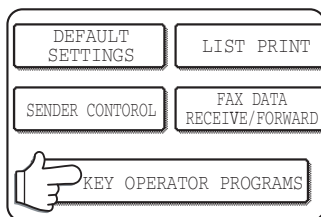
Procedure for using key operator programs

The procedure for configuring a key operator program is explained below.

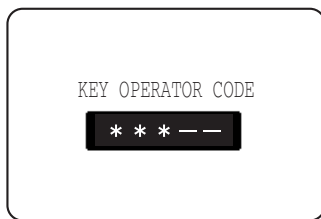
1 Press the [CUSTOM SETTINGS] key.



2 Touch the [KEY OPERATOR PROGRAMS] key.

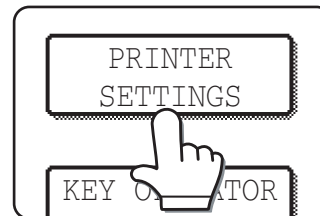


3 Use the numeric keys to enter the five-digit key operator code number.



The factory default setting for the key operator code is indicated on page 2 of the key operator's guide.

4 Touch the [PRINTER SETTINGS] key.



Follow these steps to select the program that you wish to use.

In the following steps, the setting screens for the selected program will appear. Refer to the

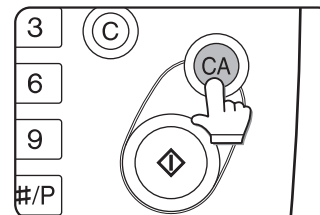
program explanations on [page 5-5](#) and following, and then follow these steps to select a setting for the program.

5 Make desired settings for the selected program.

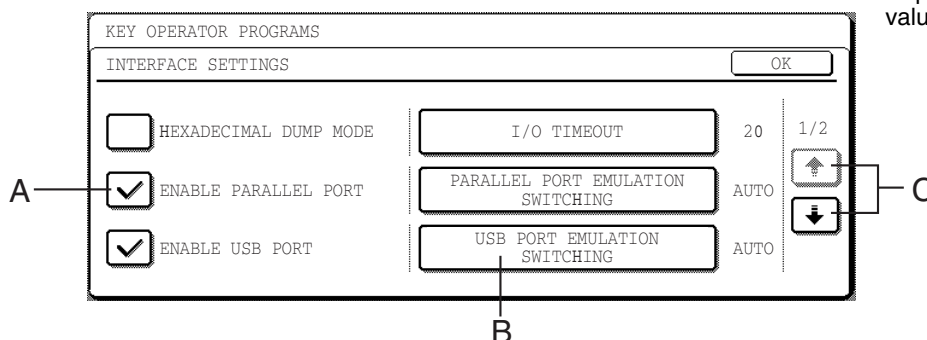
Select the desired program from the programs shown on [page 5-2](#).

Detailed descriptions for program settings start on the next page.

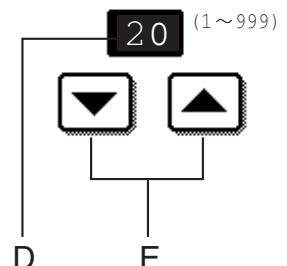
6 Press the [CA] key to exit the program.



Supplementary explanation of key operation for key operator programs



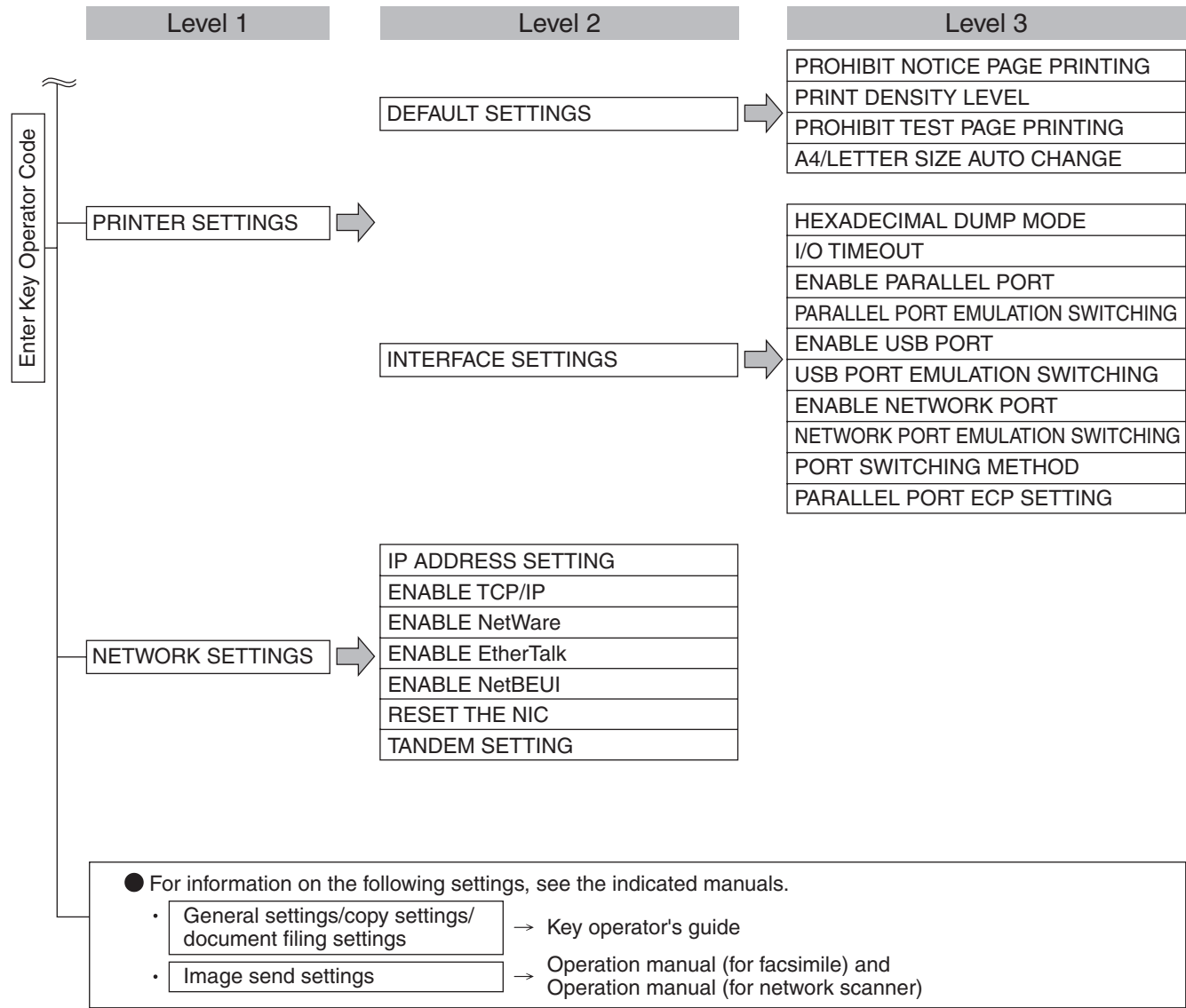
These keys and indicator are available on setting screens that require the entry of numerical values.



- A Check mark boxes are touch keys that show the status of selections. A box with a check mark means the function is "on" (enabled) and an unchecked box means the function is "off" (disabled). Alternate touches of a box will change the on/off status.
- B The name of the program category or particular item to be set will appear on the touch key. A touch of the key will select the item displayed.
- C If the settings continue on the following screen (s), touch the and keys to move back and forth through the screens. To return to the category selection screen, touch the [OK] key.
- D The currently set numerical value is displayed.
- E Numerical values can be set by touching the and keys.

Key operator program menu

The key operator programs are accessed via the following menu structure.
Refer to this menu when changing the settings explained on the following pages.



Enable parallel port

This program is used to enable or disable printing from the parallel port.

Default setting: Enable

Parallel port emulation switching

This program is used to specify a printer language to emulate when the printer is connected to a computer through the parallel port.

Setting items	Description
Auto	The printer language will switch automatically in accordance with the data from the computer.
PostScript	PostScript emulation is used to print the data from the computer. (An optional PS3 expansion kit is needed.)
PCL	PCL emulation is used to print the data from the computer.

NOTE

It is recommended to set "AUTO" (default setting) unless an error due to this setting occurs frequently.

Enable USB port

This program is used to enable or disable printing from the USB port.

Default setting: Enable

USB port emulation switching

If the machine is connected using the USB port, select the emulated printer language.

The setting items are the same as those of "Parallel port emulation switching".

NOTE

It is recommended to set "AUTO" (default setting) unless an error due to this setting occurs frequently.

Enable network port

This program is used to enable or disable printing from the network port.

Default setting: Enable

Network port emulation switching

This program is used to specify a printer language to emulate when the printer is connected to a computer through the network port.

The setting items are the same as those of "Parallel port emulation switching".

NOTE

It is recommended to set "AUTO" (default setting) unless an error due to this setting occurs frequently.

Port switching method

The machine can use the three ports shown below for printing. This program is used to select when switching between ports will take place. "SWITCH AT END OF JOB" or "SWITCH AFTER I/O TIMEOUT" can be selected. When "SWITCH AT END OF JOB" is selected, the port will be automatically selected after each print job is completed. When "SWITCH AFTER I/O TIMEOUT" is selected, the port will be automatically selected if the time set in the I/O Timeout program elapses.

- Parallel port
- USB port
- Network port

Parallel port ECP setting

This is used to enable bi-directional communication through the Centronix interface.

Select "Parallel port ECP setting" to enable data transmission both from the computer to the printer and from the printer to the computer.

Normally ECP mode is not selected.

Network settings

These programs are set when this product is used as a network printer.

After you complete the setting for one program, you must exit the key operator programs, turn off the main switch, wait briefly, and then turn on the main switch again before any other programs can be set. The program that was set will be effective after the power is turned on.

NOTE

For setting and modification of "Network settings", be sure to consult with the network administrator.

IP address setting

When using this product in a network that uses the TCP/IP protocol, use this program to set the IP address (IP address, IP subnet mask, and IP gateway) of this product. The program is set to ENABLE DHCP by factory default setting, which obtains the IP address setting automatically. When using this product on a TCP/IP network, be sure to turn on the "Enable TCP/IP" program below.

If DHCP is used, the IP address assigned to the machine may be changed automatically on occasion. If this happens, printing will not be possible.

Enable TCP/IP

When using this product in a network that uses the TCP/IP protocol, set this program. Also set the IP address using the program "IP address setting" above. Default setting: Enable

Enable NetWare

When using this product in a network that uses the NetWare protocol, set this program. Default setting: Enable

Enable EtherTalk

When using this product in a network that uses the EtherTalk protocol, set this program. Default setting: Enable

Enable NetBEUI

When using this product in a network that uses the NetBEUI protocol, set this program. Default setting: Enable

Reset the NIC

This program is used to reset all setting items of NIC (Network Interface Card) of this product to the factory default settings.

NOTE

If any of the [NETWORK SETTINGS] were changed prior to execution of this program, you must turn off the power switch after exiting the key operator program, wait briefly, and then turn on the power switch to make the factory default settings take effect.

Tandem setting

This setting is used to configure the IP address and port number of the client printer when you wish to have two machines (which are used as TCP/IP network printers) print in tandem.

The factory default setting for the port number is [50001]. Unless you experience difficulty with this setting, it does not need to be changed.

The tandem function can also be prohibited, or the reception of tandem data from the other machine can be prohibited. (Normally this is not necessary.)

To prohibit the tandem function, select "DISABLING OF MASTER MACHINE MODE".

To prohibit reception of tandem data from the other machine, select "DISABLING OF SLAVE MACHINE MODE".

NOTE

To use the tandem function when auditing mode is enabled, the same account number must be entered on both machines. If the same account number is not entered, only the server machine may print or the printed pages may not be added to the correct account.



CHAPTER 6

TROUBLESHOOTING

This chapter provides solutions to problems you may encounter when using the machine. Be sure to read this chapter whenever you encounter a problem.

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TROUBLESHOOTING

The following problems may not be due to a machine failure, so please check again before calling for service. In the event that service is required, turn off the machine main power switch and power switch, unplug the power plug from the outlet. Problems related to the printer function are described in this chapter. For troubleshooting related to general machine use, the copier function, document filing function or the network scanner function, please read "Troubleshooting" in the corresponding manuals.

Problem	Check	Solution or cause
Printer is on but data is not received.	Is the interface cable correctly connected?	Make sure the USB or parallel cable is correctly connected to the machine and your computer. For more information, consult your network administrator.
	Has the printer driver been installed correctly?	Install the appropriate printer driver. (See the "SOFTWARE SETUP GUIDE (for printer)".)
	Is the printer driver correctly selected? / Has it been configured in the network (when using as a network printer)?	Make sure that this printer is selected in the software application software or use an appropriate utility to check that the printer is registered on the network. For more information, consult your network administrator.
Data is received but not printed.	Has the specified size and type of paper been loaded?	Load paper, select another paper size or cancel printing.
Printer cannot be selected from computer.	Has the printer driver been installed correctly?	Install the appropriate printer driver. (See the "SOFTWARE SETUP GUIDE (for printer)".)
The orientation of the image is incorrect on the print.	Are the print orientation settings in the printer driver correct?	Correct the orientation in the printer driver.
The printed image is cut off.	An incorrect ratio has been selected.	Select a suitable ratio when printing.
The edges of the printed image are missing.	There are margins around the edges of the paper where printing is not possible. Does the image overlap those margins?	Change the print area or reduce the image size.
Printer prints in reverse order.	Has reverse page order been selected in the software application?	Cancel the reverse order printing in the application software.
Printer stops in the middle of a print job.	Has the tray full sensor activated and stopped printing because too many pages are in the exit tray?	Remove the paper from the exit tray.
	Is the tray out of paper?	Load paper. (see page 2-2 of "Operation manual (for general information and copier operation)")
Printing is not on desired paper size.	Has paper selection been set to Automatic in the printer driver?	Ensure that the desired paper is set in a paper tray of the printer and select "Auto Select" in the paper selection of the printer driver.
Printer write error occurs when printing from the parallel port.	Is the timeout setting for the printer driver too short?	Set a longer time in the timeout setting in the printer driver.
Password entry is requested.	Did you enter a password for the retention function?	Password is needed when executing printing. If the password is not known, printing cannot be executed.

Problem	Check	Solution or cause
The printer driver cannot be installed.	Is there sufficient free space on your hard drive?	Delete any unneeded files and applications to increase free space on your hard drive.
	Are you using an operating system that is not supported?	Make sure your operating system is supported. (See the SOFTWARE SETUP GUIDE (for printer) that accompanied the machine.)
Two-sided printing is not possible.	Is [2-Sided (Book)] or [2-Sided (Tablet)] selected in the "Main" tab of the printer driver?	Select [2-Sided (Book)] or [2-Sided (Tablet)] (page 2-2).
	Has two-sided printing been prohibited in the key operator programs?	"Disabling of Duplex" has been enabled in the key operator programs. Consult the key operator.
Not all of the image is printed.	Are multiple applications running at once?	Quit all applications that you are not using and try printing again.
Stapling does not take place.	Has use of the staple been prohibited in the key operator programs?	"Disabling of Stapler" has been enabled in the key operator programs. Consult the key operator. The inserter does not operate (when an inserter is installed).
	Did you attempt to staple more than the maximum number of pages?	Check the maximum number of pages that can be stapled (page 2-4).
The inserter does not operate (when an inserter is installed).	Has use of the inserter been prohibited in the key operator programs?	"Disabling of Inserter" has been enabled in the key operator programs. Consult the key operator.
Punching does not take place (when a punch module is installed).	Is the "Punch" checkbox selected in the "Main" tab of the printer driver?	Select the "Punch" checkbox. (page 2-5)
	Has use of the punch module been prohibited in the key operator programs?	"Disabling of punch" has been enabled in the key operator programs. Consult the key operator.
Document filing is not possible.	Has the printer driver been set to use the document filing function?	Select the "Document Filing" checkbox in the "Job Handling" tab of the printer driver. (page 2-13)
	Do user folders created in the machine appear in "Folder Information"?	Click the "Get Folder Name" button in the document filing screen to call up the folders created in the machine. (page 2-13)
	Does the user folder have a password?	Enter the password in "Folder Pass Code" in the document filing screen. (page 2-13)

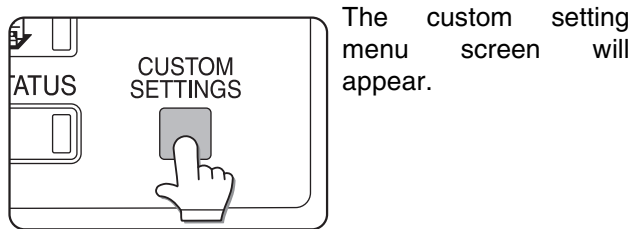
Checking the IP address

There are three ways to check the IP address:

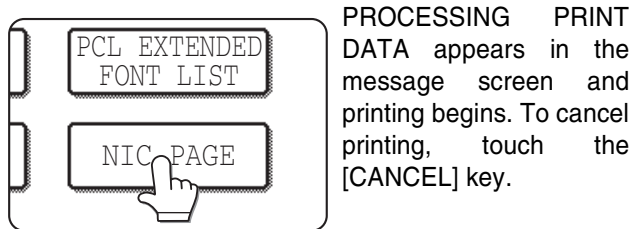
- 1. **Using [LIST PRINT] in [CUSTOM SETTINGS] in the operation panel**
Select NIC PAGE to print a list of the machine settings. The IP address that has been set for the machine can be found in this list. Follow the procedure below to check the IP address using NIC PAGE.
- 2. **Using the key operator programs**
The IP address can be verified using the key operator programs. To use this procedure, consult your key operator.
- 3. **Using the NIC Manager utility in the Software CD-ROM (2)**
The NIC Manager utility in the Software CD-ROM (2) can be used to check the IP address. For details, see the online manual (Print Server Card Users Manual) in the Software CD-ROM (2).

Checking the IP address from the [CUSTOM SETTINGS] screen of the operation panel

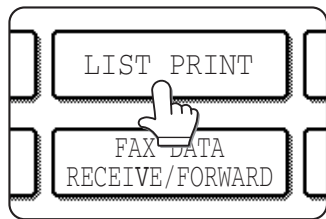
- 1 Press the [CUSTOM SETTINGS] key.



- 4 Touch the [NIC PAGE] key.

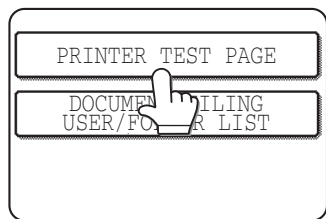


- 2 Touch the [LIST PRINT] key.



NOTE
There are a variety of different types of network environments. When using the machine in a network environment, refer to the detailed explanations in the online manual (Print Server Card Users Manual) in the Software CD-ROM (2).

- 3 Touch the [PRINTER TEST PAGE] key.





CHAPTER 7

APPENDIX

This chapter contains product specifications and other technical information.

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PRINTER SPECIFICATIONS

Memory capacity (standard)	Standard 128MB
DIMM slots for additional memory	One (64 MB to 256 MB memory can be mounted.)
Page description language	PCL6, PCL5e, PS3 emulation*
Resident font	For PCL: Outline fonts: 80 Barcorde fonts (option): 28 Bitmap fonts: 1 PostScript compatible fonts (option): 136
Interface	IEEE-1284 compatible parallel interface (P1284B connector) USB1.1 (Windows98/ME/2000/XP) USB2.0 (Windows2000/XP)
LAN connection	10Base-T/100Base-TX Supported protocols: IPX/SPX, TCP/IP, EtherTalk, NetBEUI For detailed network specifications, see the manual for the print server card. (The manual is provided in PDF format in the CD-ROM that accompanies the print server card.)
Operating system	IBM PC/AT or compatible computer: Windows® 95/98/Me, Windows NT® 4.0 (ServicePack5 or later), Windows® 2000, Windows XP® Macintosh series*: Mac OS 8.6 to 9.x, 10.1.5, and 10.2 to 10.2.8 (except 10.2.2) *An optional PS3 expansion kit is needed.
Continuous print speed	Same as continuous copying speed of machine (Note that this is for copies of the same page.)
Resolution	Data processing: 600 x 600 dpi Printing: 600 x 600 dpi, 1200 dpi equivalent x 600 dpi

Some discrepancies may exist in the illustrations and content due to improvements to the machine.

NOTICE PAGE PRINTING

A notice page will be printed when the current print job cannot be run due to a system limitation and an explanation of the limitation is too lengthy to be shown in the message display. A notice page will describe the limitation and other possible ways instead of possibilities to run the job.

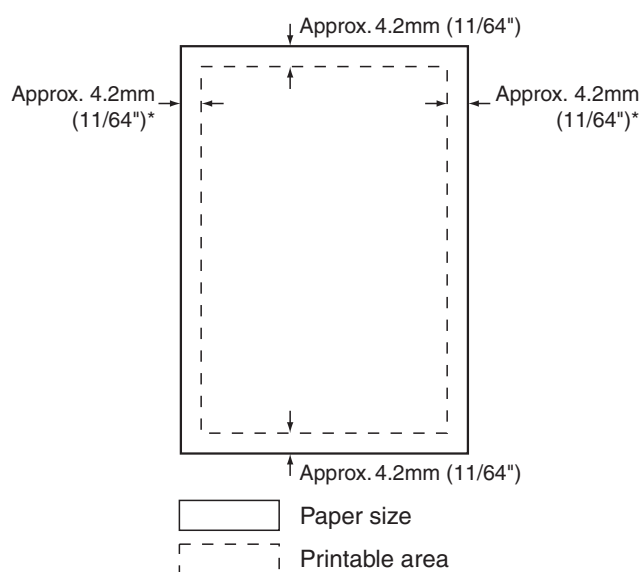
Printing of the notice page is initially disabled in the key operator programs (see "PROHIBIT NOTICE PAGE PRINTING" on [page 5-5](#)).

A notice page will be printed in the following cases.

- When the print data of a single job is so large that it cannot be held in memory. (When there are other jobs occupying memory, notice pages may tend to be printed more frequently even for jobs with small amounts of data.)
- When different paper sizes have been selected for printing within a print job and one or more of the sizes cannot be delivered to the selected exit tray or to the stapler compiler. In these cases printed paper will be delivered partly to the specified destination (tray or compiler) and partly to another exit tray.
- When a function is selected that has been disabled using the key operator programs, such as disabling of two-sided printing, disabling of the staple function, or disabling of a specified exit tray.
- An invalid account number is entered when the auditing mode has been set.

PRINT AREA

The print area of this product is shown below.



- The print area is the entire page excluding a margin of 4.2 mm (11/64") at each edge. The actual print area may vary depending on the printer driver used and the type of software application.

PCL symbol set

No.	symbol set
1	Roman-8
2	ISO 8859-1 Latin 1
3	PC-8
4	PC-8 Danish/Norwegian
5	PC-850
6	ISO 6 ASCII
7	Legal
8	ISO 21 German
9	ISO 17 Spanish
10	ISO 69 French
11	ISO 15 Italian
12	ISO 60 Norwegian v1
13	ISO 4 United Kingdom
14	ISO 11 Swedish : names
15	PC1004 (OS/2)
16	DeskTop
17	PS Text
18	Microsoft Publishing
19	Math-8
20	PS Math

No.	symbol set
21	Pi Font
22	ISO 8859-2 Latin 2
23	ISO 8859-9 Latin 5
24	ISO 8859-10 Latin 6
25	PC-852
26	PC-775
27	PC Turkish
28	MC Text
29	Windows 3.1 Latin 1
30	Windows 3.1 Latin 2
31	Windows 3.1 Latin 5
32	Windows Baltic (not 3.1)
33	Windows 3.0 Latin 1
34	Symbol
35	Wingdings

- These symbol sets are trademarks or registered trademarks of their respective owners.

